No. 4979.

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT.

HOPE NATURAL GAS COMPANY,
*Petitioner,*

vs.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON, and
PENNSYLVANIA PUBLIC UTILITY COMMISSION,
*Respondents.*

## SUPPLEMENT TO BRIEF OF PETITIONER.


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## 1. RESPONDENT THE FEDERAL POWER COMMISSION'S "ORDER REDUCING RATES," DATED MAY 26, 1942.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly and Clyde L. Seavey. John W. Scott dissenting in part.

May 26, 1942

City of Cleveland,
Complainant
vs.
Hope Natural Gas Company,
Defendant
Docket No. G-100

City of Akron,
Complainant
vs.
Hope Natural Gas Company,
Defendant
Docket No. G-101

Pennsylvania Public Utility Commission,
Complainant
vs.
Hope Natural Gas Company,
Defendant
Docket No. G-127

In the Matter of
Hope Natural Gas Company
Docket No. G-113

### ORDER REDUCING RATES

Upon consideration of the complaints, answers, petitions, and orders previously entered in these proceedings, the evidence of record, the briefs and oral arguments, and the Commission having on this date entered and

issued its Opinion No. 76 which is hereby incorporated by reference and made a part hereof;

—2—

The Commission *finds* that:

(1) Hope Natural Gas Company (hereinafter designated as the "Company") is a corporation organized and existing under the laws of the State of West Virginia;

(2) The Company purchases and produces natural gas within the State of West Virginia;

(3) The Company transports, delivers and sells large quantities of the natural gas referred to in Finding (2) to The East Ohio Gas Company and The River Gas Company at points on and along the interstate boundary between the States of West Virginia and Ohio, which gas is so transported and sold at wholesale for the purpose of resale for ultimate public consumption at points outside the State of West Virginia;

(4) The Company transports, delivers and sells large quantities of the natural gas referred to in Finding (2) to The Peoples Natural Gas Company and Fayette County Gas Company at points along the interstate boundary between the States of West Virginia and Pennsylvania, which gas is so transported and sold at wholesale for the purpose of resale for ultimate public consumption at points outside the State of West Virginia;

(5) The Company transports, delivers and sells quantities of the natural gas referred to in Finding (2) to The Manufacturers Light and Heat Company at points within the State of West Virginia, which gas is transported and sold to such purchaser at wholesale for the purpose of resale for ultimate public consumption at points outside the State of West Virginia;

(6) The transportation and sale by the Company of natural gas at the several points of delivery to the several purchasers and for the purposes stated in Findings (3), (4) and (5) constitute, in each in-

stance, the transportation and sale of natural gas in interstate commerce within the purview of the Natural Gas Act, and the rates charged and collected by the Company for the natural gas so transported and sold are subject to the jurisdiction of the Federal Power Commission;

(7) The evidence of the reproduction cost new of the Company's property used and useful in the production, transportation, delivery and sale of natural gas to the interstate wholesale purchasers named above (as of December 31, 1938) as presented by the Company in these proceedings, is hypothetical, conjectural and inherently fallacious and cannot be considered as having probative value in the determination of the allowable rate base;

—3—

(8) The evidence of the trended "original cost" of the Company's property (as of December 31, 1938) as presented by the Company is basically erroneous and cannot be considered as having probative value in the determination of the allowable rate base;

(9) The Company's restated "original cost" of its property (as of December 31, 1938) erroneously includes items and amounts in excess of the actual legitimate cost thereof as such cost is controlled by fundamental principles of cost determination, and as defined in the Federal Power Commission's Uniform System of Accounts and by decisions of this Commission;

(10) Equity and justice require the elimination of such erroneously included items and amounts referred to in Finding (9) in determining the rate base upon which the Company is entitled to earn a fair rate of return;

(11) The actual legitimate cost of the Company's property, exclusive of distribution property, property used to transport coke-oven gas, and unoperated acreage was $51,957,416 as of December 31, 1940;

(12) The actual existing depletion and depreciation in the Company's property, exclusive of distribution property, property used to transport coke-oven gas, and unoperated acreage, was $22,328,016 as of December 31, 1940;

(13) The actual legitimate cost of the Company's property, less actual existing depletion and depreciation, exclusive of distribution property, property used to transport coke-oven gas, and unoperated acreage, was $29,629,400 as of December 31, 1940;

(14) The Company's unoperated acreage is useful or imminently useful and is necessary for the continued and efficient production of natural gas and its cost should be included in the rate base;

(15) The actual legitimate cost of such unoperated acreage was $566,105 as of December 31, 1940; and is a reasonable amount to be included in the rate base for fixing future rates;

(16) Materials and supplies and cash working capital in the amount of $2,125,000 are necessary for the continued and efficient operation of the Company's interstate natural gas business and should be allowed in the rate base;

(17) The additional capital expenditures (less increases in depletion and depreciation reserves) in the three-year period, 1941-1943, will result in an average increase in net actual legitimate cost for that period of $1,392,021; and such sum should be allowed in the rate base for the determination of reasonable future rates;

—4—

(18) For the purpose of determining just and reasonable rates for the future, the rate base represented by the actual legitimate cost of the Company's property used and useful in the production, transportation and sale of natural gas in interstate commerce (Finding (13)), plus unoperated acreage, working capital and future net capital additions, is $33,712,526;

(19) The fair rate of return for the Company is not more than 6½% per annum; and $2,191,314 is the

maximum fair annual return which the Company is entitled to earn on the rate base;

(20) The operations for 1940, as adjusted, are a proper basis for fixing future rates;

(21) The operating revenues from interstate sales were $19,296,755 for 1940;

(22) The proper credit to the Company's operating expenses for the excess profits from the gasoline and butane extracted from its gas by the affiliated Hope Construction & Refining Company is $185,105 and for steam and boiler fuel furnished the affiliate is $119,592, or a total of $304,697 for the determination of future rates;

(23) Reasonable and proper allowances for operating expenses (including amortization of reclassification and rate case expenses) and after allocation of costs to local West Virginia sales, miscellaneous gas revenues, and the amount of tax required under lawful rates, are as follows:

| | |
|---|---|
| Operating Expenses | $16,272,934 |
| Miscellaneous Gas Revenues | (83,275) |
| Allocation of Costs to Local West Virginia Sales | (2,694,075) |
| Total Deductions from Interstate Revenues | $13,495,584 |

(24) The rates charged and received by the Company for the transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption are unjust, unreasonable, and excessive, and therefore unlawful, to the extent of $3,609,857 annually, determined as follows:

| | |
|---|---|
| Revenues from Interstate Sales | $19,296,755 |
| Operating Deductions | 13,495,584 |
| Net Operating Income from Interstate Sales | 5,801,171 |
| 6½% Return on Interstate Rate Base | 2,191,314 |
| Excess | $ 3,609,857 |

—5—

(25) The total allowable cost of all interstate services of the Company is $13,495,584 plus $2,191,314 for a fair return, or $15,686,898;

(26) The average rates and charges per m.c.f. of the Company, after reflecting the reductions hereinafter ordered, will be just and reasonable;

Therefore, the Commission *orders* that:

(A) The rates charged and received for the transportation and sale of natural gas by Hope Natural Gas Company in interstate commerce for resale for ultimate public consumption shall be decreased to reflect a reduction, on an annual basis, of not less than $3,609,857 in the operating revenues of that Company;

(B) The following just and reasonable average rates per m.c.f. shall be charged the five customer companies in the future:

| | *Average Rate Per M.c.f.—Cents* |
|---|---|
| The East Ohio Gas Company | 29.5 |
| The Peoples Natural Gas Company | 28.5 |
| Fayette County Gas Company | 28.5 |
| The Manufacturers Light and Heat Company | 28.5 |
| The River Gas Company | 35.0 |

(C) The Hope Natural Gas Company shall file, on or before July 1, 1942, new schedules of rates and charges for the transportation and sale of natural gas in interstate commerce to its five customer companies for resale for ultimate public consumption, which shall reflect not less than the reduction ordered in paragraph (A) and shall be the average rates per m.c.f. ordered for the respective companies in paragraph (B);

(D) The new schedules of rates and charges ordered in paragraph (C) shall be effective as to all bills based on meter readings made on or after July 15, 1942;

(E)—On and after the effective date of the new schedules of rates and charges, filed and made effective in accordance with paragraphs (C) and (D), the Hope Natural Gas Company shall cease and desist from making, demanding or receiving any rates and charges other than those ordered in these proceedings until changed by order of this Commission.

By the Commission.

(Signed) LEON M. FUQUAY,
Secretary.

## 2. RESPONDENT THE FEDERAL POWER COMMISSION'S "FINDINGS AS TO LAWFULNESS OF PAST RATES," DATED MAY 26, 1942.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly and Clyde L. Seavey. John W. Scott dissenting in part.

May 26, 1942

City of Cleveland, Complainant
vs.
Hope Natural Gas Company, Defendant
Docket No. G-100

City of Akron, Complainant
vs.
Hope Natural Gas Company, Defendant
Docket No. G-101

Pennsylvania Public Utility Commission, Complainant
vs.
Hope Natural Gas Company, Defendant
Docket No. G-127

In the Matter of
Hope Natural Gas Company
Docket No. G-113

### FINDINGS AS TO LAWFULNESS OF PAST RATES

Upon consideration of the City of Cleveland's complaint and amendment, the Company's answers, the petitions and orders previously entered in these proceedings,

the evidence of record, the briefs and oral arguments, and the Commission having on this date entered and issued its Opinion No. 76 and order, which Opinion is hereby incorporated by reference and the appropriate portions are made a part hereof;.

—2—

The Commission *finds* that:

(1) The City of Cleveland raised the issue of the lawfulness of the rate charged The East Ohio Gas Company by Hope Natural Gas Company, and requested this Commission to find the just, reasonable and lawful rate from June 30, 1939, to the date of this determination, as an aid to State regulation;

(2) The Commission has jurisdiction and authority to make such findings which are in the public interest;

(3) Hope Natural Gas Company is a corporation organized and existing under the laws of the State of West Virginia;

(4) Hope Natural Gas Company purchases and produces natural gas within the State of West Virginia;

(5) Hope Natural Gas Company transports, delivers and sells large quantities of the natural gas referred to in Finding (4) to The East Ohio Gas Company at points on and along the interstate boundary between the States of West Virginia and Ohio, which gas is so transported and sold at wholesale for the purpose of resale for ultimate public consumption at points outside the State of West Virginia;

(6) The transportation and sale of natural gas by Hope Natural Gas Company stated in Finding (5) constitute the transportation and sale of natural gas in interstate commerce within the purview of the Natural Gas Act, and the rates charged and collected by Hope for the gas so transported and sold have been subject to the exclusive jurisdiction of this Commission since June 21, 1938;

(7) The evidence of reproduction cost new of the Hope Company's property used and useful in the production, transportation, delivery and sale of natural gas to its five interstate wholesale purchasers (as of December 31, 1938), as presented by the Company in these proceedings is hypothetical, conjectural and inherently fallacious and cannot be considered as having probative value in the determination of the allowable rate base;

(8) The evidence of the trended "original cost" of Hope Company's property (as of December 31, 1938), as presented by the Company, is basically erroneous and cannot be considered as having probative value in the determination of the allowable rate base;

(9) The Hope Company's restated "original cost" of its property (as of December 31, 1938) erroneously includes items and amounts in excess of the actual legitimate cost thereof as such cost is controlled by fundamental principles of cost determination, and as defined in the Federal Power Commission's Uniform System of Accounts and by decisions of this Commission;

—3—

(10) Equity and justice require the elimination of such erroneously included items and amounts referred to in Finding (9) in determining the rate base upon which the Company is entitled to earn a fair rate of return;

(11) The actual legitimate cost of Hope Natural Gas Company's property, excluding distribution property, property used to transport coke-oven gas, and unoperated acreage, was $51,019,583 for 1939 and $51,957,416 for 1940;

(12) The actual existing depletion and depreciation in Hope Natural Gas Company's property was $21,737,823 for 1939 and $22,328,016 for 1940, and the resulting actual legitimate cost, less actual existing depletion and depreciation, and excluding distribution property, property used to transport coke-oven gas and unoperated acreage, was $29,281,762 for 1939 and $29,629,400 for 1940;

(13) The unoperated acreage was useful or imminently useful and the actual legitimate cost of such acreage in the amounts of $567,152 for 1939 and $566,195 for 1940 should be included in the rate bases;

(14) Materials and supplies and cash working capital were necessary in the amounts of $2,100,000 for 1939 and $2,125,000 for 1940, and should be allowed in the rate bases;

(15) For the purpose of determining what rates were just, reasonable and lawful since June 30, 1939, the average rate base represented by the actual legitimate cost of Hope Natural Gas Company's property used and useful in rendering interstate service (Finding (12)), plus the cost of unoperated acreage and the necessary working capital, was $32,326,398 for 1939, $32,134,710 for 1940, and $33,712,526 since 1940;

(16) A rate of return of 6½% was liberal for the period of June 30, 1939, to date;

(17) The actual operations for 1939 and 1940 are the reasonable and proper bases for determining lawful rates in those years, and 1940 operations, as adjusted, are the reasonable and proper basis for determining lawful rates since 1940;

(18) The operating revenues from interstate sales were $14,866,894 for 1939 and $19,296,755 for 1940;

(19) The proper credit to Hope Natural Gas Company's operating expenses for the excess profits from the gasoline and butane extracted from its gas by its affiliate, Hope Construction & Refining Company, and for steam and boiler fuel furnished the affiliate, was $352,516 for 1939, $304,697 for 1940 and $304,697 annually since 1940;

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(20) Reasonable and proper allowances for operating expenses (including amortization of reclassification and rate case expenses) and after allocation of costs to local West Virginia sales, miscellaneous gas revenues and the amount of tax required under lawful rates, are as follows:

| | 1939 | 1940 | Since 1940 |
|---|---|---|---|
| Operating Expenses | $14,242,454 | $15,775,195 | $16,272,934 |
| Miscellaneous Gas Revenues | ( 68,695) | ( 83,275) | ( 83,275) |
| Allocation of Costs to Local West Virginia Sales | ( 2,328,110) | ( 2,694,075) | ( 2,694,075) |
| Total Deductions from Interstate Revenues | $11,845,649 | $12,997,845 | $13,495,584 |

(21) The rates charged and received by the Company for the transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption were unjust, unreasonable and excessive, and therefore unlawful, to the extent of $920,029 for the year 1939, $4,210,154 for the year 1940, and $3,609,857 since 1940 (on an annual basis), determined as follows:

| | 1939 | 1940 | Since 1940 |
|---|---|---|---|
| Revenues from Interstate Sales | $14,866,894 | $19,296,755 | $19,296,755 |
| Operating Deductions | 11,845,649 | 12,997,845 | 13,495,584 |
| Net Operating Income from Interstate Sales | 3,021,245 | 6,298,910 | 5,801,171 |
| 6½% Return on Interstate Rate Base | 2,101,216 | 2,088,756 | 2,191,314 |
| Excess | $ 920,029 | $ 4,210,154 | $ 3,609,857 |

(22) The total required revenue for all interstate service of the Company was $13,946,865 for 1939, $15,086,601 for 1940 and $15,686,898 annually since 1940;

(23) Cost, conditions and characteristics of service show that the just, reasonable and lawful rates for natural gas sold by Hope Natural Gas Company in interstate commerce to The East Ohio Gas Company for resale for ultimate public consumption were those required to produce compensation in the amount of $11,528,608 for 1939, $11,507,185 for 1940, and $11,910,947 annually since 1940;

—5—

(24) The rates charged and received by the Hope Natural Gas Company for the transportation and sale of natural gas in interstate commerce to The

East Ohio Gas Company for resale for ultimate public consumption were unjust, unreasonable, excessive, and therefore unlawful to the extent of $830,892 during 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940.

By the Commission.

(Signed) LEON M. FUQUAY,
Secretary.

## 3. RESPONDENT THE FEDERAL POWER COMMISSION'S "OPINION NO. 76," TOGETHER WITH CONCURRING OPINION OF COMMISSIONER MANLY AND PARTIALLY DISSENTING OPINION OF COMMISSIONER SCOTT, DATED MAY 26, 1942.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

OPINION NO. 76

| | |
|---|---|
| City of Cleveland, Complainant vs. Hope Natural Gas Company, Defendant. | Docket No. G-100 |
| City of Akron, Complainant vs. Hope Natural Gas Company, Defendant. | Docket No. G-101 |
| Pennsylvania Public Utility Commission, Complainant vs. Hope Natural Gas Company, Defendant. | Docket No. G-127 |
| In the Matter of Hope Natural Gas Company | Docket No. G-113 |

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Hon. John J. D. Preston
Hon. E. B. Pennypacker
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## OPINION

BY THE COMMISSION:

These proceedings grew out of complaints filed by the cities of Cleveland and Akron, Ohio, and were enlarged by the Commission's Order of October 14, 1938, for an investigation of the reasonableness of all the interstate wholesale rates of Hope Natural Gas Company under the provisions of the Natural Gas Act.[1]

The cities of Cleveland and Akron, Ohio, filed with the Commission complaints alleging that the price charged by Hope Natural Gas Company to East Ohio Gas Company for natural gas was unreasonable and unduly discriminatory. The Pennsylvania Public Utility Commission also filed a complaint asserting that the rates charged by Hope Natural Gas Company to Peoples Natural Gas Company, Fayette County Gas Company and the Manufacturers Light and Heat Company were unlawful.

The three complaint proceedings and the proceeding instituted by the Commission were consolidated for purposes of hearing. Upon petition, the Public Service Commission of West Virginia, the State of West Virginia and the City of Toledo, Ohio, were permitted to become interveners in the consolidated proceedings.

Hearings were held, pursuant to order and notice, at intervals during 1940 at which Hope presented its case-in-

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chief. After written and oral argument the motion of the cities of Cleveland and Akron for an immediate order reducing rates to East Ohio Gas Company was denied for insufficiency of evidence. Additional hearings were conducted during the first half of 1941 and concluded in July. The evidence presented during the 43 days of hearings

[1] The term "interstate wholesale" when used in this Opinion means the sale of natural gas in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use.

covered all issues and embraced nearly a gross of extensive exhibits and about 7,000 pages of transcript. Each party to these proceedings was cognizant of the issues and was afforded ample opportunity to present evidence. Comprehensive briefs have been filed and the Commission, sitting *en banc*, has heard extensive oral argument.

## JURISDICTION

The jurisdiction of the Commission was not challenged in these proceedings. The facts show and counsel for Hope Natural Gas Company have stipulated that Hope transports and sells natural gas in interstate commerce to five companies for resale for ultimate public consumption.[2] Hope is a natural gas company within the purview of the Natural Gas Act and we may proceed with the determination of the lawfulness of its interstate wholesale rates. See *Illinois Natural Gas Co. v. Central Illinois Public Service Co.*, 314 U. S. 498; *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ....

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## OPERATIONS OF THE COMPANY

The Hope Natural Gas Company was organized in 1898 in West Virginia and is a subsidiary of Standard Oil Company (N. J.). Its property, composed of approximately 5,000 miles of pipe lines and 3,000 gas wells in West Virginia, is an integral part of the interconnected Standard

[2] Hope's pipe lines interconnect with those of its five wholesale customers and the gas which it sells to those companies flows in interstate commerce without interruption and is resold in Ohio and Pennsylvania. Hope sells and delivers gas (1) to the East Ohio Gas Company and the River Gas Company at several points along the West Virginia-Ohio state boundary; (2) to the Peoples Natural Gas Company and the Fayette County Gas Company at points on the West Virginia-Pennsylvania state boundary; and (3) to the Manufacturers Light and Heat Company in northern West Virginia, which transports and sells such gas in Pennsylvania for ultimate public consumption.

Oil System which serves the Appalachian area with natural gas. The major customers of Hope are its affiliates, The East Ohio Gas Company and The Peoples Natural Gas Company, which serve a large area including Cleveland, Akron, Youngstown, Massillon, Canton, Pittsburgh and Altoona. Hope also sells gas to its affiliate, The River Gas Company, and to two non-affiliates, Fayette County Gas Company and The Manufacturers Light and Heat Company. Hope produces about one-third of its total annual gas requirements and purchases the remaining two-thirds under more than 300 contracts.[3]

In 1940, Hope handled about 74,000,000 m.c.f. of gas and sold: (1) more than 40,000,000 m.c.f. to East Ohio Gas Company; (2) about 10,000,000 m.c.f. to Peoples Natural Gas Company; (3) more than 2,000,000 m.c.f. to Manufacturers Light and Heat Company; (4) approximately 860,000 m.c.f. to Fayette County Gas Company; (5) nearly 400,000 m.c.f. to River Gas Company; and (6) more than 11,000,000

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m.c.f. to local consumers in West Virginia. The remainder totaling about 9,000,000 m.c.f. was gas lost or used in Company operations.

Hope's natural gas is processed by an affiliate, Hope Construction & Refining Company, for the purpose of extracting the natural gasoline and butane. Another affiliate, the Domestic Coke Corporation, sells its by-product coke-oven gas to Hope for use as boiler fuel in Hope's main compressor station.[4]

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[3] Hope purchases coke-oven gas from the affiliated Domestic Coke Corp. and transports the gas to Hastings for use as compressor station fuel. It is agreed that the property and costs relating to that transaction be eliminated and the equivalent m.c.f. of natural gas be substituted at Hastings compressor station at a cost of 22¢ per m.c.f.

[4] Hope Natural Gas Company in December 1939 merged the former Reserve Gas Company, but by agreement between counsel that property and income have been segregated and excluded for the purposes of these proceedings.

## CORPORATE AND FINANCIAL HISTORY

Hope Natural Gas Company is a large, seasoned and successful utility, and du. ng its corporate history of more than forty years its capita structure has been solely in the form of common stock. Since 1908, it has been a subsidiary of Standard Oil Company (N. J.) and all of its outstanding capital stock, having an aggregate par value of approximately $28,000,000, is owned by Standard.

During Hope's existence it has paid more than $108,000,000 in dividends, $11,000,000 of which were stock dividends. From 1898 to 1941 the average annual cash dividends to stockholders exceeded 20% on the average annual amount of capital stock issued for cash or other assets.

The Company presented its balance sheet as an exhibit, which shows an owner's equity in assets, at the end of 1938, of more than $33,000,000, comprising $28,000,000 of

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capital stock and $5,000,000 of surplus. This equity is represented in assets principally by gas plant in the net amount of $15,500,000, Government bonds of $11,000,000, and cash and investments of $5,500,000. The $15,500,000 net investment per books in the Company's gas plant, including distribution property, is actually about $8,000,000, because the Company had previously transferred $7,500,000 from depletion and depreciation reserves to earned surplus.[5]

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[5] Source: Ex. No. 11, pp. 10 and 21; Ex. 61, p. 3.

| | | |
|---|---|---|
| Plant, Dec. 31, 1938, per books (including Distribution Property of about $2,795,000) | $56,213,454 | |
| Depreciation and depletion reserve, per books | 40,633,562 | |
| | | 15,579,892 |
| Less adjustments in 1934 ($5,901,000) and in 1908 ($1,650,000) transferring these amounts from depreciation and depletion reserve to earned surplus | | 7,551,000 |
| Net Investment | | $ 8,028,892 |

We will now proceed to the pragmatic determination of the lawful rates, within the ambit of our statutory authority.

## RATE BASE

The Hope Company claimed a rate base of $66,000,000 and calculated that it was earning a rate of return of about 3% from its interstate business on that base. The claimed rate base was molded from an estimate of the cost to reproduce the property less observed depreciation, plus working capital. The derived rate of return was based upon the Company's presentation of revenues and expenses averaged for 1937, 1938 and 1939.

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*The Company's Estimates of Reproduction Cost and Trended "Original Cost"*

The estimate of the Company approximated $97,000,000 for the cost to reproduce the property. That result was reached by applying unit prices for material and labor to an inventory and adding about 17% to that total for undistributed construction costs.

Many hypotheses were employed for this reproduction-cost estimate and each of them disregards the development and experience of the Hope Company. Quoted prices for pipe and other material, rather than actual current prices, were used and obsolete compressor station equipment was priced by applying quoted prices for modern equipment. The record demonstrates that the quoted price for pipe is not in fact the price that is paid. Actual prices are the result of negotiation. The calculated construction costs exceeded the actual pipe line construction costs experienced by the Hope Company during a recent period. This appraisal of the cost to reproduce the system included $14,000,000 for undistributed construction costs or overheads which ignored the experience of the Company with

respect to such costs and the fact that Hope has charged all overhead expenditures (with minor exceptions) to operating expenses in the past. It is improper and inequitable to capitalize items formerly charged to operating expenses, and in rate-making the inclusion of such expenses in the rate base would compel the rate payer to reimburse the Company more than once for the same item. We will discuss this point extensively in connection with the Company's claimed "original cost."

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The Company's hypothetical reproduction cost estimate is nearly double the actual legitimate cost of the property, although, as the record shows, the greater part of the property was constructed during the high-price period of 1917-1930.

After full consideration of the estimate of reproduction cost new presented by the Company, we find that it is not predicated upon facts and that it is too conjectural and illusory to be given any weight in these proceedings. See *Railroad Commission v. Pacific Gas & Electric Co.*, 302 U. S. 388, 397; *Re Canadian River Gas Co. et al.*, F. P. C. Op. 73.

The Company also presented a trended "original cost" estimate which exceeded $105,000,000. The objective of that estimate, according to the witness, was to reflect changes in price levels and to indicate what the original cost of the property would have been if 1938 material and labor prices had prevailed throughout the whole period of the piecemeal construction of the Company's property since 1898. At the outset this estimate includes a multi-million dollar error because the trend factors were applied to an inflated "original cost" claim of the Company, which we will discuss fully under the subject of actual legitimate cost. The evidence discloses fundamental errors in the trending process used. No consideration was given by the Company's witness to the great advances in the science of con-

struction and the improvement in the quality of pipe and equipment in the natural gas industry, during the long history of the Company.

Hope Company's own experience demonstrates that

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man-hour productivity has increased greatly throughout the years during which the Company's property was constructed. Yet the Company's witness gave no consideration to that fact, but utilized high 1938 hourly wage-rates to price the slower obsolete construction methods of the past on a time basis. It is undisputed that service qualities of pipe, including increased tensile strength and reduced weight, have been improved in recent years. Pipe is sold on the basis of weight and the heavier and inferior pipe in the Hope System was priced at 1938 prices for modern pipe, in disregard of the known improvements in the product. Another basic defect in the trending was the adoption of the arithmetical average of the cost per ton of smaller sizes of pipe when 95% of the cost of pipe in the Company's transmission lines represented pipe having greater diameters. That such a pipe trend is not representative is obvious. Furthermore, the 1938 prices upon which the trends were based, being representative of only slightly more than 1% of the total plant, furnished no dependable yardstick.

In the light of the evidence the conclusion is inescapable that the Company's trended "original cost" estimate is not founded in fact, but it is basically erroneous and produces irrational results.

The reproduction cost studies and the so-called trended "original cost" studies were the typical, hypothetical conjectures which have plagued rate regulation for more than forty years. The actual development and experience of the Hope Company were ignored. In addition, assumption upon assumption as to material and labor costs, and magni-

fied imagination as to overheads were indulged in lavishly. The results have no probative value and accordingly must be condemned.[6]

The estimates of reproduction cost and trended "original cost" lack reliability, so we turn to the evidence of actual cost of Hope's property.

*Actual Legitimate Cost*

The Company and the Commission's Staff submitted exhibits and supplied testimony on the cost of gas plant used in the Company's interstate service. The Company claimed that cost, as of December 31, 1938, amounted to $69,735,638, the Staff indicated a figure of $51,984,153, while the books disclosed an investment of approximately $52,730,666.[7]

Hope's vouchers, books and records are adequate for examination, analysis and audit. Hope kept complete records of its expenditures throughout its existence, so no estimates are required to ascertain the actual cost.

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[6] Under the recent decision of the Supreme Court involving the Natural Gas Act in *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S., . . ., and the decision of this Commission in *Re Chicago District Electric Generating Corporation*, 39 P. U. R. (N. S.) 263, involving the companion part of the Federal Power Act, such estimates of reproduction cost and trended "original cost" need not have been admitted in evidence.

[7] The book cost of the interstate facilities is derived as follows:

| | | |
|---|---|---|
| Total Plant Investment per books | | $56,213,454 |
| Less: | | |
| Distribution Property | $2,795,083 | |
| Unfinished Construction | 81,392 | |
| Intangible Plant | 30,186 | |
| Property Used to Transport Coke-oven Gas | 576,127 | 3,482,788 |
| Plant Investment, per books, of Interstate Facilities | | $52,730,666 |

Table A appearing on page 11 compares the cost of facilities used in interstate service as claimed by the Company, as shown by the books of account, and according to our findings, as of December 31, 1938.

*The Company's Estimated "Original Cost"*

The first step in the Company's determination was the taking of an inventory. The inventory units were then priced at estimated cost, including arbitrary overheads. The amounts shown as plant costs by the books were ignored, except for the purpose of aiding in estimating unit costs. As is shown by Table A, the Company's method resulted in a claimed net increase of $17,004,972 over the amount recorded as investment in the interstate properties on its books of account. The Company claims, in other words, that its books fail to show the true cost of such properties in that amount. The items of that amount which are identifiable represent expenditures previously charged to expense accounts. Some of the alleged expenditures were not incurred at all. For example, claimed interest during construction of $632,000 was not actually paid. Obviously, to the extent that the plant costs are understated, if they are, the difference must represent charges to other accounts, particularly expense accounts, in the books.

The claimed additional costs are divisible into two groups—one relating to properties constructed by the Company, and the other relating to property acquired from other utilities. Table B on page 12 shows the general nature of the $17,004,972.

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# TABLE A

| Account | Cost of Plant as of December 31, 1938 Claimed by Company | Amt. Shown by Books* | Allowed |
|---|---|---|---|
| **Natural Gas Production Plant** | | | |
| Natural Gas Producing Lands | $ 2,370 | $ 3,320 | $ 3,320 |
| Natural Gas Producing Leaseholds | 1,684,636 | 1,331,101 | 1,599,005 |
| Rights of Way | 701,556 | 529,400 | 645,391 |
| Other Land and Land Rights | 22,126 | 24,602 | 21,008 |
| Field Measuring and Regulating Station Structures | 40,773 | 28,617 | 21,139 |
| Other Prod. System Structures | 291,872 | 213,164 | 191,189 |
| Gas Wells: Construction | 17,783,637 | 4,366,934 | 4,089,478 |
| Equipment | 8,168,192 | 7,885,581 | 7,610,510 |
| Field Lines: Construction | 4,056,915 | 3,028,847 | 3,622,489 |
| Equipment | 8,244,966 | 7,929,927 | 7,671,252 |
| Field Meas. and Reg. Station Equipment | 267,099 | 249,842 | 184,385 |
| Drilling and Cleaning Equipment | 604,936 | 543,740 | 595,693 |
| Other Production Equipment | 89,102 | 45,031 | 75,532 |
| Total Production Plant | 41,958,180 | 26,180,106 | 26,333,391 |
| **Transmission Plant** | | | |
| Land | 164,105 | 158,122 | 162,942 |
| Rights of Way | 442,394 | 491,784 | 391,243 |
| Compressor Station Structures | 1,725,945 | 1,661,573 | 1,441,882 |
| Trans. Meas. and Reg. Station structures | 11,988 | 11,399 | 8,207 |
| Other Transmission System Structures | 11,509 | 7,348 | 6,776 |
| Mains | 15,180,596 | 14,413,516 | 14,132,075 |
| Compressor Station Equipment | 8,313,531 | 7,979,316 | 7,683,672 |
| Trans. System Meas. and Reg. Equipment | 26,713 | 29,463 | 17,616 |
| Other Transmission System Equip. | 23,042 | 15,188 | 21,016 |
| Total Transmission Plant | 25,899,823 | 24,767,709 | 23,865,399 |
| **General Plant** | | | |
| Land and Land Rights | 98,188 | 126,678 | 96,981 |
| Structures and Improvements | 247,427 | 237,323 | 225,888 |
| Office Furniture and Equipment | 195,911 | 239,989 | 178,683 |
| Transportation Equipment | 148,340 | 161,431 | 142,315 |
| Stores Equipment | 9,466 | 3,321 | 5,107 |
| Shop Equipment | 114,706 | 63,169 | 104,185 |
| Laboratory Equipment | 1,070 | 1,003 | 1,003 |
| Tools and Work Equipment | 4,634 | 200,761 | 4,545 |
| Communication Equipment | 347,639 | 249,121 | 248,976 |
| Miscellaneous Equipment | 1,172 | 20,484 | 1,148 |
| Total General Plant | 1,195,753 | 1,303,280 | 1,008,831 |
| Gas Plant for Interstate Service | 69,053,756 | 52,251,095 | 51,207,621 |
| Unoperated Acreage | 681,882 | 479,571 | 584,382 |
| Wells and Field Lines not in Service | | | 192,150 |
| Total Gas Plant (Exclusive of Distribution Plant and Property used to transport Coke-oven Gas) | $69,735,638 | $52,730,666 | $51,984,153 |

* For comparative purposes the amounts in this column have been classified (without change in the total) in accordance with our Uniform System of Accounts for Natural Gas Companies. The Company's study is on this basis also.

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TABLE B

*Constructed Property*

| | |
|---|---|
| Inventory, Transfer and Correcting Adjustments | $(1,821,581)[8] |
| Direct Material and Labor Costs not Capitalized | 13,580,814 |
| Unloading, Hauling and Warehouse Handling Costs | 383,454 |
| Indirect Field Costs | 396,141 |
| Overhead Costs | 2,866,414 |
| Total Claimed Adjustments to Constructed Property | $15,405,242 |
| Claimed Adjustments to Properties Purchased from Other Utilities | 1,599,730 |
| Total | $17,004,972 |

The Company's cost study was made by an engineering firm. The witness for the Company, a valuation engineer, indicated clearly that he was not concerned with the Company's past practices in determining costs and in determining expenses. To him it was of no concern whether an item had been charged to expense and the cost thereof recouped in rates, or even whether an item represented an expense under the wide discretion of management allowed by accepted principles of accounting. The realities as to past practices and determinations received no consideration. Evidently the object of the study was to determine the maximum cost which could be assigned to the properties under any theory or principle of cost determination, regardless of the fact that the Hope Natural Gas Company had been in business more than forty years and had made determinations in its regular course of business as to which of its expenditures constituted investment in plant and which constituted operating expenses.

The first proposed adjustments to book cost ($1,821,581), reflecting inventory, transfer and correcting adjust-

[8] Parentheses indicate decrease.

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ments, will be discussed hereinafter.

The second adjustment ($13,580,814) represents items previously charged to expense and not capitalized in the books or items which cannot be identified in the books and records and, therefore, may not have been incurred at all. The amount of $13,580,814 may be subdivided as follows:

| | |
|---|---|
| Well Drilling | $11,279,554 |
| Other Direct Material and Labor Cost | 996,543 |
| Labor Costs in Laying Mains, Constructing Compressor Stations, etc., During Years 1918 to 1922, Inclusive | 1,295,953 |
| Leasehold Cost | 8,764 |
| Total | $13,580,814 |

The largest item of claimed additional cost relates to labor and drilling equipment used in drilling wells. The additional amount claimed ($11,279,554) is associated with 2,633 wells. It is the Company's contention that these expenditures, which were charged to operating expenses when incurred, should now be included in the rate base.

It was the consistent practice of the Hope Company up to 1923 to charge the cost of drilling wells to operating expense. This likewise was the general practice of the natural gas industry. It followed the well-established practice of extractive industries of charging items to expense which in less venturesome enterprises were ordinarily charged to the plant account.[9] The theory underlying the practice was that additional wells were constantly needed to keep

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the Company in business, hence the cost incurred was not for the purpose of adding to the property but rather for the purpose of maintaining the business. The evidence

[9] *Re Hope Natural Gas Co.*, 1921 E 418, 439-440; *United States v. Roden Coal Co.*, 39 Fed. (2d) 425; *Marsh Fork Coal Co. v. Lucas*, 42 Fed. (2d) 83; *Commissioner of Internal Revenue v. Brier Hill Collieries*, 50 Fed. (2d) 777.

shows that the Natural Gas Association of America opposed a provision in the first uniform system of accounts for natural gas companies issued by a State commission which required capitalization of well drilling expenditures. That Association took the view that such expenditures were necessary operating expenses. In fact, Hope did not change its practice in this respect until it was required to do so by the provisions of the system of accounts for natural gas companies promulgated by the Public Service Commission of West Virginia, effective in 1923. It is significant that West Virginia's system of accounts did not require and evidently did not permit the Hope Company to reaccount for its past expenditures, but merely required a change as to treatment of well drilling expenditures beginning with its effective date.

The Company's practice of charging well drilling expenditures to operating expenses, therefore, conformed to the principles and practices of the time. One of the obvious purposes of keeping books of account is to inform management so that proper managerial decisions may be made. One of the first functions of management, of course, is to endeavor to fix prices so that revenues will cover operating expenses and yield a profit. Where it is the general practice of the industry to treat certain expenditures as operating expenses, it is manifest that such expenditures will be considered as expenses in its rate negotiations and determinations.

If there were any doubt about this matter, it would be



dispelled by the action of the Hope Company itself. In 1921 the Hope Company was involved in a rate proceeding before the Public Service Commission of West Virginia. It was a proceeding in which Hope sought to increase its rates. In that proceeding the Company claimed well drilling and other expenditures now sought to be included in the rate base, as operating expenses. They were allowed

as such by the Public Service Commission of West Virginia.[10] No further proof is needed to show that Hope considered the expenditures in question as operating rather than plant items, in its efforts to recover full operating costs plus a profit in the conduct of its business.

No greater injustice to consumers could be done than to allow items as operating expenses and at a later date include them in the rate base, thereby placing multiple charges upon the consumers.

The other direct material and labor costs of $996,543 appear, to the extent they can be identified, to have been charged in the past to maintenance and repairs.

The adjustments for cost of labor in laying mains, constructing compressor stations and other property totaling $1,295,953, and the adjustment of $8,764 to the cost of leases are treated later.

In addition to well drilling expenditures, other items now sought to be included in the plant accounts which were previously included in expenses, if they were incurred at all (the Company's method makes it impossible to determine whether or not certain of the expenditures were incurred), are as follows:

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| | |
|---|---|
| Unloading, Hauling and Warehouse Handling Costs | $ 383,454 |
| Indirect Field Costs | 396,141 |
| Other Overhead Costs | 2,866,414 |

As to these items, here again the Company followed a consistent practice, and the practice of the industry, in charging such expenditures to expense accounts. It was not customary for the natural gas industry or other extractive industries to load the plant accounts with overhead items, such as shown above. Even under the relatively definite requirements of the Commission's present Uniform System of Accounts, considerable discretion and latitude

[10] *Re Hope Natural Gas Co.*, P. U. R. 1921 E 418, 433, 439-440.

are allowed management in accounting for overhead expenditures. Accordingly, the allowance of the items mentioned would not represent the correction of past errors, but merely the substitution of present judgment for the judgment exercised at the time the expenditures were incurred, which covered a period of forty years. The important rule is that once discretion has been exercised, subsequent action must be consistent with the decisions previously reached. There is no settled principle controlling the determination of the exact amount of overheads, if any, which should be applied to the cost of plant items.

Besides claiming large additional costs for property constructed by the Company, Hope claims a net sum of $1,599,730 representing alleged additional original cost of property acquired from other utilities. These properties, acquired chiefly from affiliated utilities, were accounted for by Hope at the cost to it, which was the cost to the predecessors. Hope now claims that the costs accounted for as

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plant by the predecessors were in error in that the predecessors followed the same allegedly erroneous practices that Hope followed. It, therefore, claims that well drilling costs in the amount of $1,364,087, other direct material and labor costs of $286,173, unloading, hauling and warehouse handling costs of $18,557, indirect field costs of $38,519, other overhead costs of $122,943, and leasehold costs of $6,388, all of which, if incurred at all, the predecessors had charged to expense, should be added to its plant investment figure and included in the rate base.[11] Since these predecessor companies kept their books and records exactly as did Hope, in accordance with the general practice of the industry, the proposed adjustments, except for leasehold

[11] There were also inventory, transfer and correcting adjustments which decrease the book cost by $236,037, and they are discussed hereinafter.

costs, are in the same category as the items which Hope now attempts to restate in its plant accounts.

In the course of its study, the Hope Company determined that considerable property which was recorded in its plant accounts, was no longer in existence. In other words, there were unrecorded retirements. Offsetting the unrecorded retirements were certain items of existing property for which the Company found no costs in its plant accounts. More than likely, certain of the latter merely represented the failure to identify items which were determined to be unrecorded retirements. The net effect is a substantial adjustment ($1,821,581 for constructed property, and $232,930 and $3,107 for acquired property) for unrecorded retirements and miscellaneous corrections. The adjustment is not controverted and should be made.

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*Impropriety Of Including In Rate Base Items Previously Charged To Expense*

It has been shown that the Company's claim of additional plant cost over and above what is recorded on its books as plant investment represents largely expenditures previously charged to expense in accordance with the discretion of management. The Company, in other words, now impeaches its books and its former financial statements to regulatory bodies, tax authorities, investors, and others. It impeaches the decisions of management made at the time the expenditures were incurred. It does this in spite of the fact that its past decisions conformed to its own consistent practices, until required to change them by a regulatory agency, and to the general practice of the natural gas industry, as well as the extractive industry. The adjustments proposed, therefore, do not reflect the correction of errors in the past. Errors as to these items were not made.

The past determinations of the items constituting plant investment were deliberate, conscious acts on the part of

management at the time of the transactions. A decision obviously must be made when an expenditure occurs as to whether it represents an investment in plant or an expense. There must also be some finality to these decisions.[12] If

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they are treated as expenses at one time and as plant investment subsequently, chaos in rate-making and in corporate finance will prevail. It is no answer that many of the expenditures in question were incurred prior to the effective date of a prescribed uniform system of accounts. The Company kept plant and expense accounts throughout its history and conformed to the general business practices of the industry and like business institutions. It was evidently thoroughly convinced as to the propriety of its decisions; as witness its claim before the West Virginia Commission in 1921, that the very expenditures in question were operating expenses. The Company is now estopped from re-accounting for those expenditures.

With the decline in favor of the doctrine of "fair value" as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates. Immediately, however, we find an effort to tamper with these. There is in progress an attempt to make the reproduction cost *process* survive in the determination of actual cost of or investment in plant. Thus, in this case an inventory was taken and then units were priced at the estimated "actual cost." The method should be condemned at

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[12] Costs of exploration for and development of future gas reserves are considered current operating costs by the industry and Hope has included such costs in its current operating expenses. If retroactive accounting were allowed then the Company might restate these costs as capital investment in the future productive acreage. The Commission will allow $600,000 in annual operating expenses for exploration and development costs in fixing rates. If this item were permitted to be restated in plant cost ten years from now $6,000,000 would be added to the rate base resulting in multiple charges to consumers.

the threshold. For in addition to being permeated with conjectural estimates, it gives no heed to the realities of past events. Consistent treatment of expenses and plant investment costs is indispensable to the successful operation of the regulatory system.

This is not to say that genuine errors in the investment accounts should not be corrected and the true figures

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given recognition in the rate base. Where real errors are made, they probably should be corrected. A distinction must be made, however, between genuine errors and a change in point of view, whereby past, deliberate decisions within the scope of an accepted principle are sought to be impeached to the pecuniary benefit of the Company.

The courts and commissions which have considered this matter have generally refused to include in the rate base amounts previously charged to expense in accordance with discretion of management. In the instant case, large parts of the claimed additions to book costs relate to well drilling expenditures and alleged overheads. The very question at issue has been passed upon twice by the Supreme Court of Appeals of West Virginia. In the first case in 1924, the Natural Gas Company of West Virginia sought to include such expenditures in the rate base after they had been charged to expense. The Public Service Commission of West Virginia refused to allow them. The Supreme Court of Appeals sustained the Commission.[13] The question was raised again in 1934 by the Natural Gas Company of West Virginia. The Public Service Commission of West Virginia then concluded that the inclusion of such expenditures in the rate base was required as a matter of law. The City of Wheeling, West Virginia, appealed the Commission's decision. The Court reversed the Commission and

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[13] *Natural Gas Company v. Public Service Commission*, 95 W. Va., 557, 121 S. E. 716, 720, P. U. R. 1924 D 346, 361.

again held that items previously charged to operating expenses should not be included in the rate base.[14]

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Thus, by far the weight of authority in court and commission decisions sustains the principle, sound in equity and justice, that items previously charged to operating expenses under the allowable discretion of management should not later be included in the base on which customers are required to pay a return and depletion and depreciation allowances.[15]

The Hope Company's earnings over the years have been ample to provide for all operating expenses, including the $17,800,000 which it attempts to add to actual cost, an excessive reserve for depletion and depreciation, taxes, and large returns to investors. During the period 1898 to 1923 for which the Company seeks to re-account and expand its recorded plant costs by approximately $12,600,000 for well drilling costs alone, the average rate of earnings on the annual average invested capital (capital stock and surplus) was more than 15%.

*Actual Legitimate Cost Or*
*Gross Plant Investment*

Accordingly, we begin with the book cost in the determination of the actual legitimate cost or investment in the facilities used in the Company's interstate business. We

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[14] *Wheeling v. Natural Gas Company*, 115 W. Va. 149, 175 S. E. 339, 343-4, 5 P. U. R. (N. S.) 471, 479, app. dis. 296 U. S. 659.

[15] *Re Los Angeles Gas & Electric Corp.*, P. U. R. 1931 A, 132, 143-4, aff. 58 Fed. (2d) 256, 261, 267, 289 U. S. 287; *Re Peoples Gas Light & Coke Co.*, 19 P. U. R. (N. S.) 177, 196-8, aff. 373 Ill. 31, 25 N. E. (2d) 482, 493, 31 P. U. R. (N. S.) 193, 207, app. dis. 309 U. S. 634; *Re West Virginia Central Gas Co.*, P. U. R. 1918 C, 453, 464-6; *Re Mondovi Telephone Co.*, P. U. R. 1933 B, 319, 321-3; See *Re Northwestern Electric Co.*, 36 P. U. R. (N. S.) 202, 208-213, aff. 125 Fed. (2d) 882; *Re Canadian River Gas Co., et al.*, F. P. C. Op. 73; cf. *Chicago & N. W. R. Co. v. Com'r. Int. Rev.*, 114 Fed. (2d) 882, 886, cert. den. 312 U. S. 692.

have already found that such book cost at the end of 1938 amounted to $53,730,666. There must be deducted from the

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book cost the unrecorded retirements, or inventory adjustments in the amount of $2,057,618. There is added to the book cost the amount of $15,152 ($8,764 for constructed property and $6,388 for acquired property) representing adjustments due to errors in stating the cost of leases, and an amount of $1,295,953, representing plant costs properly capitalized and then arbitrarily charged off to operating expenses.

There is considerable question as to whether the latter amount should be restored to book cost in determining the rate base. The amount arises as follows. From 1918 to 1923 Hope followed the peculiar practice of capitalizing the cost of direct labor incurred in laying pipe lines, constructing compressor stations and in installing equipment, but at the end of each year, arbitrarily charged off the amount thus capitalized during the year. This practice was peculiar to the Hope Company and was not a general practice of the industry. It did not conform to sound accounting principles. Hope followed the correct practice during all of its existence except for the few years mentioned. Under the circumstances, the amount is restored to the investment figure and is allowed in the rate base. The allowance in this instance, however, is not to be construed as a precedent.

As of December 31, 1938, the cost of unoperated acreage ($584,382) and the cost of certain wells and field lines ($192,150) then not in service were contained in the accounts. These items are eliminated from gas plant in service as of December 31, 1938, and appropriate adjustments for the use of such property and facilities are made subsequently.

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After considering the evidence based upon the vouchers, books and records of the Company, and as a result of

the application of fundamental principles of accounting, cost determination and equity, the Commission finds, in the words of Section 6(a) of the Act, the actual legitimate cost as of December 31, 1938 in plant used in the interstate business was $51,207,621, composed as follows:

| | |
|---|---|
| Book Cost 12/31/38 | $52,730,666 |
| Less Inventory adjustments (unrecorded retirements) | 2,057,618 |
| Less Wells and Field Lines Not in Service | 192,150 |
| Less Unoperated Acreage | 584,382 |
| Sub-total | 49,896,516 |
| Plus Correction to Cost of Leases | 15,152 |
| Plus Capitalized Costs Charged Off in Error | 1,295,953 |
| Actual Legitimate Cost of Plant in Interstate Service | $51,207,621 |

There were more retirements than additions in 1939, so the actual legitimate cost was $51,099,024 at the end of 1939. The record shows net additions of $965,533 in 1940 to produce a total actual legitimate cost of $52,064,557. Certain inactive wells with the connected field lines became active in 1940 and the cost of this property is $110,316. We find that the actual legitimate cost, including such currently used property, aggregates $52,174,873 as of December 31, 1940.

This actual legitimate cost is predicated upon facts and it is the best evidence in these proceedings, so we will employ it for determining the proper and allowable rate base.

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*Depletion and Depreciation*

In determining the allowable rate base in these proceedings the actual existing depletion and depreciation should be deducted from the actual legitimate cost of the property devoted to the interstate service. See *Los Angeles Gas & Electric Corp. v. R. R. Comm.*, 289 U. S. 287,

312. Actual existing depletion and depreciation is the extent to which the service life, that is the economic life, of the property has been consumed due to such forces as exhaustion of the natural gas supply, wear, inadequacy, and obsolescence.[16] Annual depletion and depreciation measure the economic service life consumed in one year, actual existing depletion and depreciation are the accrued consumption of the utility's economic service life on a certain date; the annual allowance for depletion and depreciation must, therefore, be correlated with the actual existing amount to avoid injustice to the utility or rate payer. *Re Canadian River Gas Co., et al.*, F. P. C. Op. 73; *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263, 275; *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 10.

The Company presented inconsistent claims in this respect. It alleged a relatively small amount of accrued or existing depletion and depreciation to be deducted in fixing the rate base, but claimed large annual amounts for future operating expenses.

The Company contends that the accrued depletion and depreciation in its property equaled approximately 35%



of the reproduction cost at the end of 1938. We have weighed the estimate of reproduction cost and found it wanting. In addition, it is inequitable to predicate depletion and depreciation upon the delusive reproduction cost. The integrity of the investment will be maintained by basing depletion and depreciation upon actual legitimate cost and the Supreme Court has approved that method.[17]

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[16] *Lindheimer v. Illinois Bell Tel. Co.*, 292 U. S. 151, 167; *Re Canadian River Gas Co., et al.*, F. P. C. Op. 73; cf. *Depreciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 408, 422.

[17] *Lindheimer v. Illinois Bell Tel. Co.*, 292 U. S. 151, 167-9, 176; *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. .....

The Company determined accrued depreciation primarily by the observation process and obtained what is called a "per cent condition" of the property. For annual expense purposes, it weighted the observed depreciation with retirement of property up to the date of the study. The fallacy of the "per cent condition" theory of accrued depreciation is plain here. To illustrate, under the hypothesis of the Company's witness, in determining the "per cent condition" of certain compressor station equipment, the property would be found to have depreciated only 25% throughout its life or be in 75 "per cent condition," and then suffer a precipitous loss in the brief final stage of service. Such a theory is opposed by reason and facts. *Los Angeles v. Southern California Telephone Co.*, 14 P. U. R. (N. S.) 252, 273-4. The Company's estimate of existing depreciation was based primarily upon a sporadic visual inspection of physical deterioration. Most of Hope's production and transmission property is not visible and the extent to which the service life has been consumed can not be determined from observation alone. Also, the functional

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causes of the retirement of property are given little consideration by the Company's visual method which samples physical causes. *Re Rochester Gas & Electric Corp.*, 33 P. U. R. (N. S.) 393, 468-490. The Commission concludes that the so-called accrued depletion and depreciation claimed by the Company does not give full or proper consideration to all factors contributing to the retirement of property, and that it does not reflect the actual existing depletion and depreciation or diminished service life of the property in service.

*The Required Reserve For Depletion and Depreciation*

The same factors that cause annual depletion and depreciation cause the actual existing depletion and depreciation to be deducted from the property in fixing the rate base. In our opinion, where reasonable and proper depletion and depreciation accounting practices have been observed by a natural gas company, the resulting reserve is the best measure of the depletion and depreciation existing in the property, i.e., the accumulated cost of property which has been consumed in service.

It is well known that many electric and gas utilities have not observed sound depreciation and depletion practices. The Hope Company is in this category. For many years most of Hope's business was not under regulation. Its practices as to depreciation and depletion, like the practices of many other utilities, were inconsistent and haphazard. Its book reserve does not measure the actual existing depreciation and depletion.

This Company has actually accumulated an excessive reserve. We are confronted, therefore, with the question

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as to whether that excessive reserve, or the reserve requirement (actual existing depreciation and depletion), should be deducted in determining the rate base.[18] We have formerly indicated that public utilities ought to set up proper depreciation (and depletion) expense and that the resulting reserve should be deducted from the gross cost in the rate base determination.[19] We reiterate that view.

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[18] There are those who argue that excessive reserves should be deducted. *Pennsylvania Public Utility Comm. v. The Peoples Natural Gas Co.*, Nos. 11380, 12683 (1942), Buchanan, dissenting; See *Chesapeake & Potomac Tel. Co. v. Whitman*, 3 Fed. (2d) 938, 951-953; *New York Telephone Co. v. Prendergast*, 36 Fed. (2d) 54, 66.

[19] *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 10; *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263, 275.

We believe, however, that under such circumstances as exist in this case, where a large part of the Company's business is brought under regulation for the first time and where incorrect depreciation and depletion practices have prevailed, the best procedure is to deduct the reserve requirement in computing the rate base. This procedure will permit us to be consistent in those cases where utilities have deliberately failed to observe sound practices and as a result have deficient reserves. Thus, in the Interstate Power Company case, where the company had been negligent in accounting for depreciation and had a deficient reserve, we deducted the higher reserve requirement, as the measure of actual existing depreciation.

It should be borne in mind, however, that the deduction of the reserve requirement, rather than the actual book reserve, is for the purpose of getting a sound basis for



future regulation and control of rates. Hereafter, the Company, in accordance with this Opinion and under our System of Accounts, is required to record proper depreciation and depletion expense. Hence, the books of this Company, as well as the books of others subject to our jurisdiction, after once having the reserve requirement determined, should reflect in substantial degree the proper depreciation and depletion. Use of the reserve requirement in this case will produce a proper starting figure so that the book reserve can be deducted hereafter as the proper measure of the actual depreciation and depletion. This treatment will then be consistent with the view that the book reserve is the proper deduction from the gross cost in determining the rate base.

It becomes necessary, therefore, to ascertain the best measure of the reserve requirement. The purpose of depletion and depreciation accounting is to offset diminution

in service value[20] of property being used in service, and to determine as accurately as possible another element of the cost of service for a particular period. All of Hope's physical property, except certain land, will be depleted or depreciated completely when it reaches the end of its useful or economic life. Physical and functional forces, whether their effects are visible or not, are constantly reducing the service life of the Company's property. Service life is the equivalent of economic life or the utility of the property.

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Hope incurs plant costs to provide for future service and to make production possible. As natural gas service is rendered the economic value of property is gradually consumed, and the property is finally retired at the end of its service life. The cost of the property consumed annually in rendering that service should be charged to operating expenses to reflect the depletion and depreciation incurred.

The Commission's Staff presented a depletion and depreciation reserve requirement study in these proceedings. Estimates were made of the over-all service lives of the properties by classes; those average service lives were converted into depreciation rates, and then applied to the cost of properties to determine the portion of the cost which had expired, that is, which related to the consumed service lives. The study covers the operations of the Company from its beginning in 1898 to December 31, 1940. It shows annual amounts for each group of property from the date installed to the date of retirement, and it concurrently provides the necessary reserves for property retired and for the ultimate retirement of existing property. The fundamental principle that annual expense for depletion and depreciation must be harmonized with accrued depletion and depre-

[20] "Service value." is the difference between original cost and the net salvage value of gas plant. Depletion and depreciation signify the consumption of service life of property and when that is translated into dollars it shows the loss in service value.

ciation has been applied here. The straight-line service life method was used to compute the reserve requirement for all of the material, equipment and structures of the Company, and the unit-of-production method was applied to plant costs which are associated with the gas supply, i.e., gas producing lands and leases, field line and gas well con-

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struction; rights-of-way, and costs of abandoning gas wells.[21] The service life study was made by a properly qualified Staff engineer who analyzed Hope's past experience, including the retirement of property over the years. He gave consideration to relevant service life data on other pipe lines. He also considered the functional and physical aspects of depreciation. As an aid in the determination of service lives he made a field inspection of the Company's physical properties. The unit-of-production method used by the Staff was related to the gas reserves of the active wells of the Company. This case is free from the usual complexities involved in the estimate of gas reserves because the geologists for the Company and the Commission presented estimates of the remaining recoverable gas reserves which were about one per cent apart. The permeability and porosity characteristics of the region cause isolated pools of natural gas, and the Company's gas production properties are intermingled with non-productive areas and other companies' properties. This situation necessitated the segregation of Hope's property into gas producing areas for the depletion and depreciation reserve requirement study. Gas rights, well construction and connected field line construction costs are consumed in service proportionately with the depletion of the associated gas supply. Well equipment and field pipe line material are recovered and used again when the various sources of gas supply are exhausted. These facts of operation have been

[21] As defined in the Uniform System of Accounts.

recognized in the ascertainment of the required reserve for depletion and depreciation.

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The Staff recommended the depletion and depreciation reserve requirement for Hope's production, transmission and general plant in the amount of $23,520,561 as of December 31, 1940.[32] After a careful analysis of the evidence we have accepted certain adjustments advocated by the Company and find that the depreciation and depletion reserve should be not less than $22,328,016 as of December 31, 1940. These adjustments are as follows: (1) Due to the plant inventory adjustment made by the Company, as of December 31, 1938, and accepted by all parties, a net reduction in the plant accounts was made which represents property retired prior to December 31, 1938, but not so recorded on the books. The Company contends that 10 years is a fair approximation of the average period by which these retirements have been accumulating, hence the depreciation provisions should be reduced for the 10-year period. Had the retirements been made on the books as soon as the property was retired the depreciation base would be reduced and the annual provisions would be less. It is impossible to determine the actual dates the property was retired and we accept the 10-year period as a reasonable estimate of the average time from the date the property was retired to December 31, 1938. This adjustment results in a reduction of $31,106 in annual depreciation expense for each year and

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a reduction of $311,060 in the reserve requirement as of December 31, 1938. (2) In the case of lines lifted, Hope has

[32] That recommended required reserve is after a deduction of $1,162,710 for cost of abandoning property. The depreciation rates used in the reserve requirement study make proper provisions for the inevitable cost of abandoning property. But during the period 1898-1931 Hope charged the cost of abandoning property to maintenance expense, rather than to the depreciation reserve as a part of the net salvage.

usually retired labor cost and charged it to the depreciation reserve. But in the case of pipe retired in connection with a replacement the original labor was not always retired and the renewal labor was charged to operating expense. The depreciation rates applied by the Staff include provisions for the retirement of all labor and materials, hence its reserve requirement computation includes accruals for construction labor cost on the main pipe lines which has been retired and not charged to the depreciation reserve. The Company has estimated an amount of $272,693 representing the additional retirements of labor cost which we will allow as a reduction in the reserve requirement. (3) The group depreciation rate of 2.5% employed by the Staff in its study should be reduced to 2.22% for gas well equipment. As revised the rate for gas well material is the same as for field line material, although the evidence indicates that a somewhat shorter average life has been experienced for gas well material than for field line material. At the rate of 2.22% the annual depreciation expense will be reduced $21,110 for 1939 and $20,911 for 1940. Consistent with the reduction in the annual depreciation expense the reserve requirement at the end of 1938, 1939 and 1940 will be reduced $566,771,[23] $587,881, and $608,792, respectively.

The first two of the above-mentioned adjustments are the result of certain accounting practices of Hope prior to

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December 31, 1938 and do not affect depreciation expense for the years subsequent to that date. The reserve requirement which the Commission finds to be reasonable and proper is summarized as follows:

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[23] Total provisions from 1898 to 1938, inclusive, amount to $5,060,456 at a 2.5% depreciation rate and $4,493,685 at a 2.22% depreciation rate for gas well equipment.

*Depletion and Depreciation Reserve Requirement*

| | Dec. 31, 1938 | Dec. 31, 1939 | Dec. 31, 1940 |
|---|---|---|---|
| Amount Computed by Staff | $23,501,356 | $24,072,167 | $24,683,271 |
| Less Staff Adjustment for Cost of Abandoning Property | 1,162,710 | 1,162,710 | 1,162,710 |
| Amount Recommended by Staff | 22,338,646 | 22,909,457 | 23,520,561 |
| Less: Unrecorded Retirements | 311,060 | 311,060 | 311,060 |
| Unretired Labor on Transmission Line Replacements | 272,693 | 272,693 | 272,693 |
| Change in Depreciation Rate for Gas Well Equipment | 566,771 | 587,881 | 608,792 |
| Total Adjustments | 1,150,524 | 1,171,634 | 1,192,545 |
| Required Depreciation and Depletion Reserve | $21,188,122 | $21,737,823 | $22,328,016 |

The required depletion and depreciation reserve, as we have determined it upon the record, is the best evidence of the measure of actual existing depletion and depreciation, and it will be deducted from the actual legitimate cost of the Company's property for rate-making.[24] The reserve requirement on any selected date is the total of the annual provisions for depletion and depreciation less the actual retirements of property. The method used here determines the amount required annually to reimburse the Company for property consumed in service, and it results in a cor-

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relation of the annual expense and the accumulated reserve. The method is just and consistent for each operating period because the costs utilized are matched with the revenues produced by the property in service.

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[24] See *Re Long Island Lighting Co.*, 18 P. U. R. (N. S.) 65, 146-151 189-191; aff. 249 App. Div. 918, 292 N. Y. S. 807, 809, 18 P. U. R. (N. S.) 225, 226; *Re Rochester Gas & Electric Corp.*, 33 P. U. R. (N. S.) 393, 489, 502-3; National Association of Railroad and Utilities Commissioners, Proceedings of Fiftieth Annual Convention (1938) pp. 473-4.

As we have noted, the Company has built up an excessive reserve by charging large annual allowances for depletion and depreciation to operating expenses in the past.

The book reserve for interstate plant at the end of 1938 amounted to about $39,000,000 which is $18,000,000 in excess of the amount we determined as the reserve requirement. In addition, twice in the past the Company has transferred amounts aggregating $7,500,000 from the depreciation and depletion reserve to surplus. When these latter adjustments are taken into account, the excess becomes $25,500,000, which has been exacted from the rate payers over and above the amount required to cover the consumption of property in the service rendered and thus to keep the investment unimpaired. *Lindheimer v. Illinois Bell Tel. Co.*, 292 U. S. 151, 169, 174.

*Estimated Additional Fixed Capital Expenditures*

To make the rate base figures current, the Company presented an estimate of $8,956,500 in "capital expenditures" which it planned for production, transmission and general plant during 1941, 1942 and 1943. Obviously these proposed gross additions should increase the allowable rate base only to the extent that net actual legitimate cost will be increased. Also, $1,270,000 was estimated for 1943 additions to meet the demands of new or increased business.

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The Commission has not given direct effect to those expected 1943 additional revenues in the forecast of revenues for rate-making, so that $1,270,000 will not be included in the rate base. The determination of the estimated increase in net plant cost requires the consideration of additions and retirements of plant and the effect on the depletion and depreciation reserve of future accruals and retirements. Giving due weight to all these factors the increased

net actual legitimate cost, averaged for the period 1941-1943, is $1,392,021.[25]

The Company presented a general plan which it has for the construction of a pipe line from West Virginia to Louisiana to supplement its present source of supply of gas and to meet predictable increased demands for natural gas. Due mainly to the shortage of materials caused by this war, the status of that proposed line is so uncertain that it need not be considered in these proceedings. When the proposed line is constructed and definite information is presented concerning its effect on the rate base and net income, the Commission will give the matter timely and



appropriate consideration.

*Other Used and Useful Property*

The Company's geologist grouped the unoperated acreage[26] into three classes: (1) protective acreage within a mile of producing wells comprised 64%; (2) prospective

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[25] Estimated Fixed Capital Expenditures 1941-1943 $8,956,500
Less: Expenditures in Expectation of New or Increased Business $1,270,000
Gross Property Retirements 2,700,000 3,970,000
Estimated Net Change in Plant 4,986,500
Deduct: Estimated Net Change in Depletion and Depreciation Reserve—Depletion and Depreciation Accruals 1941, 1942, 1943 4,362,500
Less: Retirement Losses Chargeable against Reserve 2,160,042 2,202,458
Estimated Increase in Net Actual Legitimate Cost $2,784,042
Average for the period ($2,784,042 ÷ 2) $1,392,021

[26] Operated gas acreage is any acreage that is being drained by producing gas wells and all other acreage is considered as unoperated. Hope has held less than two unoperated acres to one operated acre during the last ten years.

acreage for shallow-sand production within three miles of producing wells comprised 14%; and (3) prospective acreage for deep-sand production within three miles of producing wells comprised the remaining 22%. The total unoperated acreage as of December 31, 1940, was 539,285 acres. The Company has undertaken an extensive drilling program, including deep-test wells, and it is a reasonable expectation that within a few years nearly all of this unoperated acreage will become productive, or will be proved unproductive and cancelled. There is no evidence that Hope has acquired large blocks of unoperated acreage to obtain a monopoly on the source of supply, and there is evidence that all of its unoperated acreage is necessary and useful, or imminently useful, in rendering gas service. The cost of unoperated acreage will be included in the rate base. The Commission finds that the actual legitimate cost of unoperated acreage was $584,382 as of December 31, 1938, $567,152 for the end of 1939, and $566,105 as of December 31, 1940.

*Materials and Supplies Plus Cash Working Capital*

There is no controversy over the amount of materials

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and supplies required by the Company. The monthly average of materials and supplies on hand is the most accurate measure of the Company's requirements. The Commission finds that $1,228,599 is the necessary average amount for materials and supplies in 1939, 1940 and the future. This is sufficient, on the average, to meet requirements for more than a year.

A witness for the Company used a period of 45 days as the lag in the receipt of revenues. He stated that 45 days of operating expenses, including gas purchased, would measure the cash working capital required by the Company on a practical operating basis and he computed the amount to be $1,754,008.

A period of 45 days is ample to measure the amount of cash required for payment of operating expenses. Cost of gas purchased must be excluded from the computation because revenues from gas sales are received before the payment for purchased gas is due. The Company has approximately $500,000 on hand at all times representing taxes which are not paid until many months after they are accrued and these tax funds are available for bank balances and working capital requirements. The Commission will allow cash working capital in the amount of $871,407 for 1939 and $896,401 for 1940. This is the maximum allowable amount computed on 45 days of operating expenses, excluding cost of gas purchased, and allowing prepaid expenses in full.

The Commission finds that $2,100,000 was required for materials and supplies and cash working capital in 1939, and that $2,125,000 was necessary for 1940 and will be ade-



quate for the future.

*Conclusions With Respect to the Rate Base*

There is a further matter with respect to plant investment which the Commission will consider before making the final determination of the rate base. Prior to January 1, 1939, the Company charged all administrative and general costs to operating expense. Beginning January 1, 1939, the Company tentatively adopted the practice of capitalizing a portion of its administrative and general expenses. This discretion by the management is permissible under the Commission's Uniform System of Accounts. This tentative capitalization of administrative and general expenses was reconsidered by the Company and it has informed the Commission that it wishes to resume the regular practice of including all general and administrative costs in operating expenses. This change in the tentative accounting policy is reflected in the verified annual report for

1941 filed with this Commission. The amounts of $79,439 for 1939 and $138,018 for 1940 are removed from plant costs and included in operating expense for the respective years. Theoretically, adjustments to annual depreciation expense and to the reserve requirement should be made on account of the foregoing, but the amounts are so insignificant in a case of this magnitude that no inequity will result from not making them.

The analysis of the evidence which we have discussed with respect to the components of the rate base and our conclusions may be summarized thus:

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| | Dec. 31, 1938 | Dec. 31, 1939 | Dec. 31, 1940 | Future |
|---|---|---|---|---|
| Gross Investment in Gas Plant in Service (Exclusive of Distribution Plant, and Property Used to Transport Coke-oven Gas) | $51,207,621 | $51,019,585 | $51,957,416 | $51,957,4[illegible] |
| Less: Actual Existing Depletion and Depreciation | 21,188,122 | 21,737,823 | 22,328,016 | 22,328,0[illegible] |
| Net Investment | 30,019,499 | 29,281,762 | 29,629,400 | 29,629,4[illegible] |
| Add: Net Capital Additions 1941, 1942, 1943 | | | | 1,392,0[illegible] |
| Useful Unoperated Acreage | 584,382 | 567,152 | 566,105 | 566,1[illegible] |
| Working Capital | 2,100,000 | 2,100,000 | 2,125,000 | 2,125,0[illegible] |
| Interstate Rate Base | $32,703,881 | $31,948,914 | $32,320,505 | $33,712,5[illegible] |

The Commission, therefore, adopts the foregoing amounts as the interstate rate base for the dates indicated, for the Company's property assembled as a whole and doing business as part of an integrated system. The Commission finds that the rate base for 1939 was the average of the rate base amounts at the beginning and the end of that year or $32,326,398, that the rate base for 1940 was the average of the rate base amounts at the beginning and the end of that year or $32,134,710, and that the rate base for fixing future rates is $33,712,526.

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## OPERATING REVENUES AND EXPENSES

For rate-making purposes the Commission has given consideration to the actual operating revenues and expenses of the Company for 1937-1940, inclusive, and has also considered the income statements since 1898. In testing the reasonableness of existing rates the latest experience of the Company, as disclosed by the record, is the closest reflection of the present and future operations.

### *Interstate Gas Service Revenues*

There is no controversy over the volume of gas sold or the revenues received by Hope. The Commission finds that during the years 1939 and 1940 the interstate gas sales to the five customer companies were as follows:

| | 1939 | | 1940 | |
|---|---|---|---|---|
| | M.c.f. billed | Revenues | M.c.f. billed | Revenues |
| East Ohio Gas Company | 33,907,672 | $12,359,500 | 40,376,091 | $14,726,736 |
| Peoples Natural Gas Company | 3,864,304 | 1,371,757 | 9,738,612 | 3,437,207 |
| River Gas Company | 237,640 | 83,174 | 388,750 | 136,063 |
| Fayette County Gas Company | 840,398 | 264,725 | 859,106 | 270,618 |
| Manufacturers Light and Heat Company | 2,500,755 | 787,738 | 2,241,684 | 706,131 |
| | 41,350,569 | $14,866,894 | 53,604,243 | $19,296,755 |

### *Interstate Operating Expenses*

The Commission has considered the Company's operating expenses as recorded on its books, as claimed for rate-case purposes, and as recommended by the Staff. The subsequently discussed adjustments to the Company's operating expenses are made to the amounts as actually recorded

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on its books for the years 1939 and 1940.

### *Depletion and Depreciation Expenses*

The annual allowance for depletion and depreciation included in operating expenses is determined by the same

rates and methods used to determine the depletion and depreciation actually existing in plant.

The Commission finds that $392,500 for 1939 and $624,440 for 1940 is the proper allowance for depletion expense. The present and prospective demands upon the production system indicate that production for the year 1940 is the proper guide for future depletion expense and we will allow $624,440 as the average cost of depletion in our determination of the cost of service. (Depletion expense is computed on the unit-of-production, hence it varies with the actual production of gas.)

The record shows that Hope Company's annual depreciation expense has remained relatively stable, the proper amounts for 1939 and 1940 being as follows:[27]

| | 1939 | 1940 |
|---|---|---|
| Production Plant | $351,811 | $349,676 |
| Transmission Plant | 460,267 | 460,245 |
| General Plant | 25,725 | 25,676 |
| Total Depreciation Expense | $837,803 | $835,597 |

[27] Determined by applying the following straight-line depreciation rates to the average depreciable investment for the year:

| | Rate |
|---|---|
| *Production Plant:* | |
| Structures | 4.17% |
| Field Line, Material, Meas. & Reg. Station Equipment | 2.22% |
| Gas Well Equipment | 2.22% |
| *Transmission Plant:* | |
| Main Lines, Rights-of-Way and Meas. & Reg. Station Equipment | 1.56% |
| Structures | 2.50% |
| Compressor Station Equipment | 2.56% |
| *General Plant:* | |
| Structures | 2.17% |
| Office Furniture & Equip. | 4.00% |
| Other Equipment | 3.57% |
| Communication Equipment | 3.85% |

The Commission finds that the annual depletion and depreciation allowance required for future operating expenses is $1,460,037.

*Exploration and Development Costs*

Section 14(b) of the Natural Gas Act authorizes the Commission to determine the "propriety and reasonableness of the inclusion in operating expenses, capital, or surplus of all delay rentals or other forms of rental or compensation for unoperated lands and leases." Delay rentals paid periodically on natural gas lands to reserve the gas rights for a future supply of gas are included in exploration and development costs. The other costs included are those associated with the drilling of non-productive wells, the abandonment of non-productive leases and the abandonment of projects on which preliminary expenditures were made to determine the gas prospects of available acreage.

The Hope Company, like other companies in the natural gas industry, has followed the conservative practice of charging all exploration and development costs to operating expenses. Exploration and development costs are necessary to replenish the Company's gas supply in order to maintain continued gas service. The Commission has included Hope's gas producing acreage and its useful unoperated acreage at cost in the rate base. The annual depletion allowance is based upon the actual legitimate cost of gas producing leases so there is no margin in that annual allowance to cover exploration and development costs. In fairness to the investors and the rate payers the Commission will make an allowance for delay rentals related to the unoperated acreage and the other exploration and development costs in operating expenses. Hope incorrectly stated the cost of abandoned and surrendered leases in 1939 and

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1940 and we find that the cost of leases abandoned should be included in exploration and development costs in the respective amounts of $45,164 for 1939 and $12,422 for 1940. The Company's exploration and development costs were $500,344 in 1939 and $407,920 in 1940. In view of the Company's extensive program for drilling wells in the next few years and its recent experience with respect to exploration and development costs, the Commission finds that the proper and reasonable future annual allowance for such costs is $600,000 for rate-making purposes.

*Reclassification and Rate Case Expenses*

The Hope Company presented evidence to show that it has spent $675,000 in making reclassification studies in order to comply with the recent Systems of Accounts prescribed by the West Virginia Commission and the Federal Power Commission. The Company also showed expenditures totaling $825,000 as its expenses in this rate case. A contention is made by the Company that it should be allowed an interest rate of 8% on the "unamortized balance" of its reclassification and rate case expenses. In fact, however, the Company has charged all these costs to operating expenses as they were incurred during the years 1938-1941 and the rate payers have already paid enough to reimburse the Company. The Company's interstate wholesale rates have been excessive for several years and the unusually large amount of rate case expenses would ordinarily prompt the Commission to disallow any such expenses to be amortized in the future under the rates the Commission will prescribe because it results in a duplica-

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tion of charges. But in view of the Supreme Court's statement that even where rates in effect are excessive the utility should be allowed its reasonable expenses for presenting its side to the Commission, the Commission con-

cludes that the rate case expenses and the reclassification expenses, totaling $1,500,000 should be spread over a 10-year period beginning January 1, 1939, by the inclusion of $150,000 annually in operating expenses.[28] The Company has charged rate case and property reclassification expenses to operating expenses as incurred in the amounts of $543,121 for 1939 and $624,041 for 1940. Those amounts will be eliminated from operating expenses for rate-making, and the allowance of $150,000 annually for ten years will be made instead.

*Affiliate's Excess Profits From Processing Hope Company's Gas*

Hope Construction & Refining Company, an affiliate, extracts gasoline and other by-products from the natural gas of Hope Natural Gas Company. The extraction of gasoline and butane is profitable and is necessary to make the natural gas marketable and transportable. The process of extracting gasoline and butane reduces the heating value of the natural gas and consumes a certain volume of Hope's natural gas, thus imposing a burden upon the gas business.[29] Much of the gasoline extracted from Hope's natural gas has been sold to the Standard Oil Company at about one-half the price received from sales to others. It is sig-

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nificant that the Hope Natural Gas Company processed its own gas before 1920. The natural gas customers are entitled to be credited with a share of the profit from the processing of Hope's gas, even as they would pay the deficit if that essential processing were not profitable. It is agreed that it is proper to make a credit for a portion of the profits realized by Hope Construction & Refining Com-

[28] *Driscoll v. Edison Light & Power Co.*, 307 U. S. 104, 120-121.

[29] *Re Hope Natural Gas Co.*, P. U. R. 1921E 418, 428-430.

pany from the processing of Hope's gas, but there is a dispute over the amount of the credit. The Commission concludes that the credit proposed by the Company, being a royalty of 1/4 of the gross earnings from the gasoline and butane extracted, is not supported by sufficient evidence. The excess profits of the affiliated company above the cost of processing Hope's gas and a fair rate of return on its investment is the proper credit to Hope Natural Gas Company. See *United Fuel Gas Co. v. Comm'n*, 278 U. S. 300, 319-321; *Dayton Power & Light Co. v. Comm'n*, 292 U. S. 290, 295. The cost of processing Hope's gas includes all of the affiliated company's related operating expenses, including depreciation expense, taxes, and a liberal 6½% rate of return on the net investment, plus working capital, devoted to the processing function. The affiliated company's extraction plants are usually located near Hope's compressor stations. The Commission finds that Hope should have received payments of $117,641 in 1939 and $119,592 in 1940 for the steam and boiler fuel which it furnished its affiliate at the extraction plants, and that the gas vapors which are returned to Hope after processing belong to Hope as part of its natural gas. From the record we

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find that Hope Construction & Refining Company had the following average net investment and required working capital devoted to processing Hope's natural gas:

| | 1939 | 1940 |
|---|---|---|
| Gross Investment | $1,716,145 | $1,696,510 |
| Depreciation Reserve Requirement | 1,208,739 | 1,260,312 |
| Net Investment | 507,406 | 436,198 |
| Working Capital | 80,000 | 80,000 |
| Average Net Investment | $ 587,406 | $ 516,198 |

The Commission finds that Hope's affiliate has earnings from the processing of gas in excess of a fair return and that these excess profits are applicable as reductions

of Hope's operating expenses. For 1939 and 1940 these excess profits are determined as follows:

| | 1939 | 1940 |
|---|---|---|
| Gasoline and Butane Revenues | $791,451 | $770,028 |
| Related Operating Expenses | 518,394 | 551,370 |
| Net Processing Income | 273,057 | 218,658 |
| Return at 6½% on Net Investment Plus Working Capital | 38,181 | 33,553 |
| Excess Profits | $234,876 | $185,105 |

In prescribing future rates the affiliate's excess profits for 1940 will be employed as a conservative measure of Hope's portion of the profits from the gasoline and butane extracted from its gas.

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*Other Adjustments to Operating Expenses*

Hope furnishes management services to several affiliated companies at cost, and credits the proceeds to miscellaneous gas revenues thereby permitting the cost of those services to others to remain in its operating expenses. The Commission, therefore, finds that operating expenses should be reduced $192,415 for 1939 and $109,194 for 1940 for the cost of services billed to others in order to reflect actual net operating expenses.

Hope furnishes natural gas to Hope Construction & Refining Company for use in repressuring oil wells. The gas is returned to Hope's system at reduced pressures. An amount of 2½¢ per m.c.f. is regarded as the cost of recompressing the natural gas returned to the Hope Company. Hope records these transactions as sales and purchases of natural gas and that practice overstates both revenues and expenses. The Commission finds that operating expenses and revenues should be reduced $72,388 for 1939 and $73,644 for 1940 to eliminate duplication of cost in production and transmission expenses.

The Company has eliminated the property and expenses relating to the transportation of coke-oven gas used as fuel at its Hastings Compressor Station and in its figures has substituted the cost of an equivalent amount of natural gas priced at 22¢ per m.c.f. The Commission agrees with the Company and finds that $295,158 for 1939 and $333,036 for 1940 should be eliminated from operating expenses, and that $107,758 for 1939 and $126,000 for 1940 should be included in operating expenses to reflect the



equivalent cost of natural gas for the quantity of coke-oven gas used as fuel in the Hastings Station.

Hope furnishes steam from its compressor stations without charge to Hope Construction & Refining Company for use in the extraction plants, with the exception of the steam furnished from Goff Compressor Station, and does not record this transaction on its books. The necessary adjustment for this free steam has been made by the Commission. The Company credits revenue instead of expenses with the value of steam furnished by its Goff Station, thereby overstating both gas service revenues and the cost of compressing natural gas. The Commission, therefore, finds that operating expenses should be reduced $4,404 for 1939 and $6,000 for 1940 to state the actual cost of operation.

Hope bills the Peoples Natural Gas Company at the rate of 38.5¢ per m.c.f. for the natural gas sold and includes the gross amount of the billings in revenues. The Peoples Company must compress that gas to transport it to market, so Hope refunds 3¢ per m.c.f. to Peoples under the provision of the sales contract and includes this amount in its operating expenses as a cost of compressing gas. This accounting practice followed by Hope overstates the actual revenues and overstates the actual operating expenses. The Commission finds that the cost of compressing gas has been stated incorrectly and that operating expenses should be reduced $115,923 for 1939 and $292,158 for 1940.

Certain donations were included by the Company in Administrative and General Expenses. The Commission finds that donations amounting to $5,183 for 1939 and $3,496



for 1940 are not allowable costs for purposes of rate-making and should be deducted from operating expenses.

The Company has included $10,926 for the settlement of a claim for damages and $16,318 to meet a deficiency in its insurance plan for employees in general expenses for the year 1939. These expenses are applicable to prior years' operations and therefore not allowable for 1939.

Hope recorded the salvage received from an experimental liquefying gas plant as revenues in the amount of $23,896. That amount should have been applied as a reduction of the cost of the experiment, which cost was charged to 1940 operating expenses. Therefore, the Commission finds that 1940 operating expenses should be reduced $23,896.

*State and Miscellaneous Federal Taxes*

The Company has included in taxes for the years 1939 and 1940 certain amounts which should not have been included, and has failed to include certain other amounts which should have been included. The following table shows the amounts:

| | 1939 | 1940 |
|---|---|---|
| **Taxes Not Applicable** | | |
| Taxes applicable to prior years | $23,349 | $17,099 |
| W. Va. taxes billed others | 10,768 | 41,334 |
| Taxes not applicable to gas operations | 2,741 | 3,218 |
| | 36,858 | 61,651 |
| **Taxes Applicable** | | |
| Underaccrual of taxes | 16,548 | 313 |
| Net Tax Adjustment | $20,310 | $61,338 |

The Company has over-accrued Federal Income taxes on its books and the Commission has made a deduction of

$33,479 for 1939 and $16,480 for 1940 to reflect the taxes actually paid which were $191,521 for 1939 and tentatively reported to be $912,313 for 1940.

*Specific Distribution Expenses*

The Commission finds that certain amounts included in depreciation, administrative and general expenses, and taxes are specific distribution costs, as follows:

| | 1939 | 1940 |
|---|---|---|
| Depreciation | $ 82,000 | $ 89,345 |
| Taxes | 126,981 | 141,640 |
| Administrative and General | 17,237 | 13,231 |
| Total | $226,218 | $244,216 |

*Operating Expenses Summary*

The total of the Commission's adjustments to operating expenses per books results in a reduction of $1,186,002 for the year 1939 and a reduction of $1,199,958 for the year 1940, and they are summarized as follows:

| | 1939 | 1940 |
|---|---|---|
| **Decreases in Operating Expenses:** | | |
| Excess Profits on Gasoline and Butane | $ 234,876 | $ 185,103 |
| Steam Furnished H. C. & R. Co. " " " —Goff Station | 117,640 | 119,592 |
| Refund to the Peoples Nat. Gas Co. for compressing gas | 4,404 | 6,000 |
| Gas used in repressuring oil wells | 115,923 | 292,158 |
| Management Fees and Expenses | 72,388 | 73,644 |
| Excess Cost of Coke-oven gas | 192,415 | 109,194 |
| Donations | 187,400 | 207,036 |
| Salvage from Liquefying Gas Experiment | 5,183 | 3,496 |
| Taxes | — | 23,896 |
| Income Tax | 20,310 | 61,338 |
| Reclassification and Rate Case Expenses | 33,479 | 16,480 |
| Expenses applicable to Reserve Gas Co. | 543,121 | 624,041 |
| Expenses applicable to prior years | 125 | — |
| | 27,244 | — |
| Total Decreases | 1,554,508 | 1,721,978 |

| | 1939 | 1940 |
|---|---|---|
| **Increases in Operating Expenses:** | | |
| Abandoned Leases | $ 45,164 | $ 12,422 |
| Adm. & General Expenses capitalized in error | 79,439 | 138,018 |
| Depletion and Depreciation | 93,903 | 221,580 |
| Reclassification and Rate Case Expenses | 150,000 | 150,000 |
| Total Increases | 368,506 | 522,020 |
| Total Adjustments | $1,186,002 | $1,199,958 |

The functional classification of operating expenses per books and after the application of the foregoing adjustments follows:

| | 1939 | | 1940 | |
|---|---|---|---|---|
| **Operating Expenses** | **Per Books** | **Allowed** | **Per Books** | **Allowed** |
| **erstate Operating Expenses:** | | | | |
| Natural Gas Production | $ 1,439,971 | $ 1,186,578 | $ 1,427,594 | $ 1,227,930 |
| Gas Purchased | 7,746,854 | 7,675,105 | 8,605,981 | 8,533,779 |
| Transmission Expenses | 1,906,993 | 1,481,833 | 2,437,381 | 1,818,335 |
| Administrative and General Expense | 1,593,814 | 1,069,090 | 1,653,623 | 1,187,336 |
| Depletion | 18,400 | 392,500 | 18,384 | 624,440 |
| Depreciation | 1,200,000 | 837,803 | 1,309,418 | 835,597 |
| Amortization (other) | 6,369 | 6,369 | 5,996 | 5,996 |
| Exploration and Development Costs | 455,179 | 500,343 | 395,498 | 407,920 |
| Taxes: State and Miscl. Federal | 1,211,732 | 1,053,117 | 1,348,005 | 1,133,862 |
| Federal Income Tax (before tax saving) | 225,000 | 191,521 | 928,793 | 912,313 |
| Total Interstate | 15,804,312 | 14,394,259 | 18,130,673 | 16,687,508 |
| **ecific Distribution Expenses:** | | | | |
| Distribution | 201,929 | 201,775 | 215,128 | 215,128 |
| Customers' Acctg., Coll. and Sales Exp. | 166,180 | 164,167 | 161,917 | 160,908 |
| Administrative and General | | 17,237 | | 13,231 |
| Depreciation | | 82,000 | | 89,345 |
| Taxes | | 126,981 | | 141,640 |
| Total Distribution | 368,109 | 592,160 | 377,045 | 620,252 |
| Total Operating Expenses | $16,172,421 | $14,986,419 | $18,507,718 | $17,307,760 |

*Future Operating Expenses*

The operating expenses as determined for the purpose of estimating the future cost of interstate service are based primarily on the actual operating cost for the year 1940, the latest available data in the record. That year reflects an increase of $2,300,000 over the operating expenses of 1939 and is the best guide to present and future costs.

The Commission finds that the following adjustments to 1940 costs are reasonable and proper for the purpose of estimating future operating expenses for rate fixing:

| | | |
|---|---|---|
| Increase in wages not reflected in 1940 operating costs | | $202,172 |
| Increase in West Virginia property taxes not reflected in 1940 operating costs | | 81,751 |
| Decrease due to the following non-recurring costs which were included in administrative and general expenses for 1940: | | |
| Cost of moving Company office from Pittsburgh, Pa. to Clarksburg, W. Va. | $41,750 | |
| Experimental liquefying gas plant | 8,492 | |
| Pennsylvania State income tax | 4,601 | |
| Decrease | | 54,843 |
| Increase in Exploration and Development costs to allow an average amount of $600,000 annually in the future costs | | 192,080 |
| Total net increase over 1940 operating expenses | | $421,160 |

*Federal Income Tax*

In accord with practice, Hope's income tax return for 1940 was prepared on a tentative basis. The evidence in the record shows that the net taxable income was approximately $3,801,304 for 1940 and was $1,160,733 for 1939, that the tax rate was 24% for 1940 and 16.5% for 1939, and that the income tax was approximately $912,313 for 1940 and was $191,524 for 1939.

The Company does not report operating revenue deductions for tax purposes the same as it records them on its books.[30] Adjustments for rate-making and accounting purposes do not affect operating expenses for tax purposes, because that amount is determined by the administration of the federal Revenue Acts. The complete effect of all Commission adjustments is shown by any increase or decrease in revenues which results from a rate order. In order to determine a reasonable allowance for income taxes it is necessary only to apply the proper tax rate to the net taxable income applicable to the test year and to give effect to any tax saving or increase by reason of a change in revenue due to a rate order.

A combined normal and surtax rate of 40% is being discussed in Congress. We will use that rate for the purpose of computing the future income tax allowance. Based on 1940 net taxable income of $3,801,304 the income tax would be $1,520,522 at a 40% tax rate.

Each dollar of the indicated reduction in gross revenues will result in a reduction of forty cents in income taxes. The following computation shows the indicated reduction in rates and the amount of income taxes by applying the rate of return found to be fair and which is discussed in the subsequent section:

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[30] The net income per books in 1940 was $5,234,175 after book income taxes of $928,793 or $6,162,968 before income taxes. The net taxable income for that year was $3,801,304 showing that Hope claimed $2,361,664 for tax deductions not reflected in operating expenses on its books.

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| | Before Income Tax Saving | After Income Tax Saving |
|---|---|---|
| Operating Revenues from Interstate Sales | $19,296,755 | $15,686,898 |
| Deductions: | | |
| Interstate Operating Expenses (Excluding income taxes) | 16,196,355 | 16,196,355 |
| Other Gas Revenues | ( 83,275) | ( 83,275) |
| Allocation of costs to local West Va. Sales[31] | ( 2,694,075) | ( 2,694,075) |
| Federal Income Tax at 40% | 1,520,522 | 76,579 |
| Net Operating Revenue from Interstate Sales | $ 4,357,228 | $ 2,191,314 |
| Return at 6½% on Interstate Rate Base of $33,712,526 | 2,191,314 | |
| Excess Earnings before Income Tax Saving | 2,165,914 | |
| Income Tax Saving | 1,443,943 | |
| Excess Earnings after Income Tax Saving | $ 3,609,857 | |

The Commission finds that the amount of $76,579 is an adequate allowance for Federal Income taxes for the future.[32]

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[31] Computed as follows:

| | | |
|---|---|---|
| West Virginia Operating Revenues | | $3,435,675 |
| Specific Distribution Expenses | $ 620,252 | |
| Return at 6½% on Distribution Property | 121,348 | 741,600 |
| Allocation of costs to W. Va. Sales | | $2,694,075 |

[32] Computed as follows:

| | |
|---|---|
| Net Taxable income for 1940 | $3,801,304 |
| Reduction in revenues | 3,609,857 |
| Revised Net taxable income | 191,447 |
| Tax Rate | 40% |
| Allowance for Income Tax | $ 76,579 |

The operating expenses allowed for the future are shown by the functional classification in the following tabulation:

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| | 1940 | Adjustments For Future Operating Changes | As Adjusted For Future |
|---|---|---|---|
| **Interstate Operating Expenses:** | | | |
| Natural Gas Production | $ 1,227,930 | $ 202,172 | $ 1,430,102 |
| Gas Purchased | 8,533,779 | | 8,533,779 |
| Transmission Expenses | 1,818,335 | | 1,818,335 |
| Administrative and General Expense | 1,187,336 | ( 50,242) | 1,137,094 |
| Depletion | 624,440 | | 624,440 |
| Depreciation | 835,597 | | 835,597 |
| Amortization (other) | 5,996 | | 5,996 |
| Exploration and Development Costs | 407,920 | 192,080 | 600,000 |
| Taxes—State and Misc. Federal | 1,133,862 | 77,150 | 1,211,012 |
| Federal Income Tax | 912,313 | (835,734) | 76,579 |
| Total Interstate | 16,687,508 | (414,574) | 16,272,934 |
| **Specific Distribution Expenses:** | | | |
| Distribution | 215,128 | | 215,128 |
| Customers' Acctg., Coll. & Sales Promotion | 160,908 | | 160,908 |
| Adm. and Gen. Expense | 13,231 | | 13,231 |
| Depreciation | 89,345 | | 89,345 |
| Taxes | 141,640 | | 141,640 |
| Total Distribution | 620,252 | | 620,252 |
| Total Operating Expenses | $17,307,760 | $(414,574) | $16,893,186 |

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## RATE OF RETURN

Many factors enter into the determination of what constitutes a fair rate of return in each rate case. The Supreme Court has stated the principal factors in *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm.*, 262 U. S. 679, 692-3. They are that the return of a public utility shall be equal to that generally being made at the same time and in the same region on investments in other enterprises attended by corresponding risks and, that the return should be sufficient to assure confidence in the finan-

cial soundness of the utility and to maintain its credit and enable it to attract the capital necessary for the proper discharge of its public duties.

The record contains an abundance of evidence on the subject of rate of return. The information includes investors' appraisal of the natural gas industry, comparative risk rata, interest rates and yields on securities of natural gas and electric utilities, statistics showing the growth and stability of the natural gas indusfry, the trend of the cost of money and its current cost, commodity price indices, industrial production, employment, and payroll indices, federal reserve bank rediscount rates, national income payments and other economic data, idle money statistics, the financial history of the Hope Company and the facts about recent financing by its parent Standard Oil Company. That evidence reveals unmistakably that, compared to industrial and railroad enterprises, the utility business has relatively greater stability. Moreover, it shows also that interest rates generally are now lower than

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they have ever been in this century; it discloses that the yields on better issues of natural gas company bonds sold in the last year or two are close to 3%.

The Company's contention that it should be allowed a rate of return not less than 8% is unreasonable. The record shows that the Hope Company is a seasoned enterprise whose risks have been minimized by (1) ample past and present provisions for depletion and depreciation with concurrent high profits; (2) protected established markets, through affiliated distribution companies, in populous and industrialized areas; and (3) available supplies of gas locally to meet requirements, except on certain peak days in the winter, which it is feasible to supplement in the future with gas from other sources. During the forty-two years of its history, to 1941, Hope has earned on its owners' equity an annual average profit of 12% and, in addition,

has built up through annual provisions charged to expense, depletion and depreciation reserves far in excess of requirements. Hope faces no hardship with respect to increased taxes, operating expenses, and inflation, greater than those faced by similar enterprises. The Company's efficient management, established markets, financial record, affiliations, and its prospective business place it in a strong position to attract capital upon favorable terms when it is required.

In making the findings on rate of return, the national and international situations have commanded our attention and entered our deliberations. The Commission is aware of the increased demands made upon Hope for gas due to



the war program. Considering these matters, the underlying factors, and all of the evidence in the record, the Commission finds that 6½% is the fair rate of return for the Hope Natural Gas Company. This rate of return being for the future, has been set only after endeavoring to weigh all known and predictable elements; in setting it we have made allowance for presently unforeseeable contingencies. Our views on the subject of rate of return are consonant with recent decisions by the Supreme Court and other courts and commissions involving natural gas companies.[33]

## LAWFULNESS OF PAST RATES

In 1938 the Cities of Cleveland and Akron, Ohio, filed complaints with the Federal Power Commission alleging that the rate which Hope charged East Ohio Gas Company

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[33] *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ...; *Peoples Gas Light & Coke Co. v. Slattery*, 373 Ill. 31, 25 N. E. (2d) 482, 500-501, 31 P. U. R. (N. S.) 193, 217-218, App. Div. 309 U. S. 634; *East Ohio Gas Co. v. Cleveland*, 27 P. U. R. (N. S.) 387, 412, Aff. 137 O. S. 225, 28 N. E. (2d) 599, 612, 35 P. U. R. (N. S.) 158, 174-175; *Re Montana-Dakota Utilities Co.*, 32 P. U. R. (N. S.) 121, 128; See *Re Canadian River Gas Co. et al.*, F. P. C. Op. 73.

was unjust, unreasonable and unlawful. These complaints were registered before Hope filed its five interstate wholesale rate schedules which are involved in these proceedings. The acceptance of a rate schedule for filing does not mean that the Commission approves it, and does not establish the justness or reasonableness of the rate. *Re Home Gas Co.*, 39 P. U. R. (N. S.) 102, 109. On October 14, 1938, this Commission instituted an investigation of the reasonableness of all of Hope's interstate rates. If it had been possible to adduce the volume of evidence required for the disposition of such a complex matter within a few months,

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the Commission would have prescribed the reasonable interstate wholesale rates for 1939 and subsequent years. The City of Cleveland raised the issue of the lawfulness of the rate charged by Hope to the East Ohio Gas Company and asked this Commission, as an aid to State regulation, to make a separate determination of the reasonable rates since June 30, 1939. Originally the City of Cleveland requested this Commission to find the lawful Hope-East Ohio rates since June 21, 1938, but it now represents that the subject is idle for rates prior to June 30, 1939, because those rates which Cleveland consumers were obligated to pay East Ohio have been settled. The Commission does not have the authority to fix rates for the past and to award reparations. But Congress did empower and instruct the Commission in Section 5(a) of the Natural Gas Act to fix future rates, and as a step in that process we must necessarily consider the reasonableness of past and existing rates. When the issue is raised and the public interest will be served, we consider as a necessary part of that duty the power to examine the entire rate problem involved and to determine what rates were lawful in the past. Also, Section 14(a) of the Act authorizes the Commission to investigate any facts which it finds necessary in order to determine whether Hope has violated any provision of the Natural Gas Act. Furthermore, the Commis-

sion has power to perform any act, pursuant to Section 16, which is necessary or appropriate to carry out the provisions of the Act. Under Section 4(a) of the Act any interstate wholesale rate that is not just and reasonable is unlawful. *Federal Power Commission v. Natural Gas Pipe-*

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*line Co.*, 315 U. S. .... Hope's rate collected from East Ohio Gas Company was lawful after June 21, 1938, the effective date of the Act, only to the extent that it was just and reasonable. The City of Cleveland states that the Ohio Commission is investigating the reasonableness of the East Ohio Gas Company's bonded retail rates in Cleveland for the period since June 30, 1939, and that the lawfulness of Hope's rate is an important factor in the case. Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness of the interstate wholesale rates charged by Hope and other natural gas companies.[34]

In response to the request of the City of Cleveland, the Commission will make the appropriate findings of fact as to the lawfulness of the rates charged East Ohio by Hope since June 30, 1939. The Interstate Commerce Commission has furnished precedents for the performance of this public duty.[35] Congress intended that this Commission cooperate with State Commissions and municipalities, and the provisions of Sections 5(b) and 17 are special evidence of such intent.

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[34] Sections 1, 2, 4 and 5(a). See *Missouri v. Kansas Natural Gas Co.*, 265 U. S. 298, 308; *Illinois Natural Gas Co. v. Central Illinois Public Service Co.*, 314 U. S. 498, 506; *Kentucky Nat. Gas Corp. v. P. S. C.*, 28 F. Supp. 509, 513, aff. 119 Fed. (2d) 417.

[35] *W. A. Barrows Porcelain Enamel Co. v. Cushman Motor Delivery Co.*, 11 M. C. C. 365, 366; *Dixie Mercerizing Co. v. ET & WNC Motor Transp. Co.*, 21 M. C. C. 491, 492. See: *United States v. Morgan*, 307 U. S. 183, 313 U. S. 409; *Lima Tel. Co. v. P. U. C.*, 98 O. S. 110, 120 N. E. 330.

## REASONABLE EARNINGS AND RATES FOR THE FUTURE

Future reasonable earnings and rates must be fixed with consideration of a forecast of operating revenues and

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expenses. The most recent experience of the Company is the best guide for prognostications. The President of the Company predicted a great increase in sales for 1941 over 1940. Comparative income figures for the first quarters of 1940 and 1941 show an increase of $592,000 in net operating income or about 20%. The increasing demands for natural gas in the industrialized areas of Hope's markets are common knowledge. It seems certain that 1940 will be the lowest year, on an earnings basis, of the 1940-1944 period. Upon a consideration of all the relevant facts in the record and the future prospects, the Commission finds that 1940 is a conservative "average" year and should be used in rate-making in these proceedings. This is a conservative basis because allowance will be made for all probable future increases in the rate base and operating expenses while the operating revenues for the relatively low year of 1940 are employed as the test in fixing rates for the future.

Applying the 6½% rate of return to the rate base for the future of $33,712,526, produces $2,191,314 as the amount of annual return which the Company is entitled to earn in the future. Hope's income available for return is not less than $5,801,171, so the excess of $3,609,857 is the sum by which existing revenues must be reduced.

Hope's gas sales revenues are classified between intrastate sales and interstate sales for purposes of determining the sales and rates subject to the jurisdiction of this Commission.

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Hope's entire properties are located within the State of West Virginia and production, transmission, compressing and general facilities are used jointly for intrastate or

local sales and interstate or export sales. Therefore, a classification or allocation is necessary to determine operating expenses and return applicable to the interstate business. Certain direct costs pertaining to distribution property and sales in West Virginia are easily segregated from the joint costs. The allocation of the remaining joint costs is made in accordance with the following facts and principles which are undisputed in the record and accepted by all parties to these proceedings.

The Company's local retail business in West Virginia is incidental to its major business of exporting gas from West Virginia. In determining the allocation of joint expenses to the local West Virginia business, this fact was given consideration, with the result that a smaller amount of expenses was allocated to that business than would have resulted by the application of one of the customary allocation methods. Briefly, the amount of joint expenses (including return) allocated to the local business was that amount which, together with the specific local expenses, would give the Company a 6½% return on the net investment in property used exclusively in the local business. As indicated above, a more orthodox allocation probably would have resulted in assigning a larger share of the joint costs to the West Virginia sales and a greater amount of the excess profit, although the amount would not be material, to the interstate sales. The method used was



proposed by representatives of the Company and was not controverted.

The following schedule (Col. (c)) shows the excess of future net operating revenue over 6½% return on the interstate rate base, and Columns (d) and (e) show the prescribed rates and revenues after giving effect to the rate reduction:

**Net Operating Income Available For Return**

Rate Base for Interstate Sales $33,712,526

| | M.c.f. | Before Reduction | After Reduction | |
|---|---|---|---|---|
| | | | Prescribed Rates M.c.f.—cents | Amount |
| (a) | (b) | (c) | (d) | (e) |
| **Operating Revenues from Interstate Sales:** | | | | |
| East Ohio Gas Company | 40,376,091 | $14,726,736 | 29.50 | $11,910,947 |
| Peoples Natural Gas Company | 9,738,612 | 3,457,207 | 28.50 | 2,775,504 |
| River Gas Company | 388,750 | 136,063 | 35.00 | 136,063 |
| Fayette County Gas Company | 859,106 | 270,618 | 28.50 | 244,845 |
| Manufacturers Light and Heat Company | 2,241,684 | 706,131 | 28.50 | 638,880 |
| Total Interstate Revenues | 53,604,243 | $19,296,755 | | $15,706,239 |
| **Deductions:** | | | | |
| Operating Expenses | | 16,272,934 | | 16,272,934 |
| Other Gas Revenues | | (83,275) | | (83,275) |
| Allocation of Costs to Local West Virginia Sales | | (2,694,075) | | (2,694,075) |
| Total Deductions from Interstate Revenues | | 13,495,584 | | 13,495,584 |
| Net Operating Income from Interstate Sales | | 5,861,171 | | 2,210,655 |
| 6½% Return on Interstate Rate Base | | 2,191,314 | | 2,191,314 |
| Excess of Future Net Operating Income over 6½% Return on Interstate Rate Base | | $ 3,609,857 | | $ 19,341 |

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The Company's intrastate rates are under the jurisdiction of the Public Service Commission of West Virginia. The West Virginia Commission and the State of West Virginia are intervenors in these proceedings and no objection was made by them to the method used herein for the allocation of cost to local operations in West Virginia.

The evidence on the cost of service allocated among the five customer companies and the conditions of service for the respective companies disclose that no reduction in rates

[36] It is not considered necessary to refine average rates per m.c.f. more than the prescribed rates shown above and the result is the margin of $19,341.

is applicable to the affiliated River Gas Company. Among other reasons for this determination, is the fact that the River Gas Company is a small company and has a poor load factor. Accordingly, the total amount of the reduction in interstate rates is applicable to the East Ohio Gas Company, Peoples Natural Gas Company, Fayette County Gas Company and the Manufacturers Light and Heat Company. The present average rates per m.c.f. are 36.5¢ for East Ohio Gas Company, 35.5¢ for the Peoples Natural Gas Company, 35¢ for the River Gas Company, and 31.5¢ for Fayette County Gas Company and the Manufacturers Light and Heat Company.

The conditions and characteristics of service, required by the contracts, are similar for the East Ohio Gas Company and the Peoples Natural Gas Company with respect to obligations and priorities by classes of consumers, but there is a great difference with regard to delivery pressures. Hope Company delivers gas to the East Ohio Company at sufficiently high pressures so that no additional compression is required by the East Ohio Company for de-



livery of the gas to the ultimate consumers. On the other hand, Hope delivers gas to the Peoples Natural Gas Company, at various pressures, into that company's Brave Compressor Station and the Peoples Company must compress the gas for transportation to the ultimate consumers. From the evidence we conclude that the differential of one cent between the average price per m.c.f. for gas sold to the East Ohio and the Peoples Companies is reasonable, and it reflects the difference in the cost, conditions and characteristics of service.

Considering the cost of rendering service to the Fayette County Gas Company and the Manufacturers Light and Heat Company, and the conditions and characteristics of service to those companies, the fact that Hope knows precisely what deliveries it must make to them from day

to day and the fact that those two companies buy less than 6% of the total gas sold by Hope, the Commission finds that the rate for these companies should not be different from the rate paid by the Peoples Natural Gas Company. In the absence of compelling reasons to the contrary; it is good and desirable practice to fix rates that are uniform. Applying this principle in these proceedings the Commission will prescribe uniform rates for the Peoples Natural Gas Company, Fayette County Gas Company and the Manufacturers Light and Heat Company.

After considering all the evidence with respect to Hope's interstate wholesale rates and the proper average rates per m.c.f. for the five customer companies at the respective points of delivery, the Commission finds the fol-

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lowing rates to be just and reasonable:

| | Average Rate Per. M.c.f.—Cents |
|---|---|
| East Ohio Gas Company | 29.5 |
| Peoples Natural Gas Company | 28.5 |
| Fayette County Gas Company | 28.5 |
| Manufacturers Light and Heat Company | 28.5 |
| River Gas Company | 35.0 |

In passing, it might be noted that the over-all rate of return for 1940 would have been 8% if the new rates had been in effect that year and if the earnings from the distribution property had remained unchanged. This rate of return is reduced to 6½%, because of estimated increase in expenses and increase in rate base which we have allowed for the future.

Appropriate findings and order will be entered in accordance with this Opinion.

(Signed) LELAND OLDS,
*Chairman,*

(Signed) CLAUDE L. DRAPER,
*Commissioner,*

(Signed) BASIL MANLY,
*Commissioner,*

(Signed) CLYDE L. SEAVEY,
*Commissioner.*

Dated at Washington, D. C.
this 26th day of May, 1942.

(Signed) LEON M. FUQUAY,
*Secretary.*

City of Cleveland
Complainant
v.
Hope Natural Gas Company
Defendant
Docket No. G-100

City of Akron
Complainant
v.
Hope Natural Gas Company
Defendant
Docket No. G-101

Pennsylvania Public Utility Commission
Complainant
v.
Hope Natural Gas Company
Defendant
Docket No. G-127

In the Matter of
Hope Natural Gas Company
Docket No. G-113

MANLY, Commissioner, concurring:

I have joined in the majority opinion of the Commission in this case, with respect to the deduction of the "depreciation reserve requirement" in preference to the depreciation reserves carried on the books of the company, because such action seems to be required by the precedent established by the unanimous decision of the Commission in the Interstate Power case.[1]

In that case the depreciation reserves carried on the books of the Interstate Power Company were obviously deficient, as a result of "unsatisfactory" and "haphazard" accounting practices. They amounted to only about 2½ per cent of the electric plant account. If these utterly de-

[1] *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 10.

ficient book reserves had been accepted as the proper deduction for depreciation in arriving at the rate base, it would have given the company an advantage to which it was not entitled and would have resulted in imposing an unfair burden on the consuming public.

—2—

The Commission therefore, in that case as in the present case, determined on the record what the proper "depreciation reserve requirement" should be and deducted that amount in arriving at the rate base. In the Interstate case such requirement was found to be approximately 28 per cent of the electric plant account, or more than ten times the proportion carried on the company's books. In the instant case the reserves carried on the books are in excess of what the Commission has determined to be a proper reserve requirement, but the principle is exactly the same. We cannot, without discrimination, apply one principle in cases where the reserves are deficient and another where they are excessive. To do so would undermine the very foundation of utility regulation.

It may be noted also that, while many of the natural gas companies have built up excessive depreciation reserves, largely because they had no sound basis for determining the probable service life of their properties, this is not true in the electric utility industry. There it is probable, although no exact determination has been made, that a majority of the companies have established inadequate depreciation reserves. To apply the principle of deducting book reserves to the electric utility industry would therefore be grossly unfair to a large part of the consuming public.

Attention should also be directed to the fact that, until the passage of the Federal Power Act in 1935 and the Natural Gas Act in 1938, the depreciation policies of both

—3—

the electric utilities and the natural gas companies, as regards their interstate operations, were not subject to regulation. Under such conditions, while it is true that the amounts set up on the books as depreciation reserves were derived from revenues collected from customers, they did not, as under regulation, play a determining part in fixing the level of rates and the consequent amount of the revenues. Without regulation, the good old rule of "What the traffic will bear" is controlling and depreciation policies are an afterthought, determined by the management and board of directors. It follows therefore that, during the pre-regulatory period, the customers would not have contributed any more or less to the company's revenues, regardless of what depreciation program was pursued.

Finally, it may be noted that if the Hope company in the instant case had been improvident and dissipated its earnings to such an extent that its depreciation reserves should now be grossly deficient, the utmost that the Commission could do would be to direct the deduction of a proper "depreciation reserve requirement." It is difficult, therefore, to understand how it can be argued that, because it has prudently set aside for depreciation an amount greater than such requirement, it should now be penalized in fixing its rate base. Such a policy, it seems would place a premium on improvident and wasteful management because, until the Commission has made its official determination of the reserve requirement, no one can say with assur-

—4—

ance what it should be.

If the Commission, in the years that lie ahead, consistently requires proper reserve requirements to be set up on the books of interstate electric utilities and natural gas companies, and proper annual depreciation to be set aside, the time will soon come when all such companies will be on a uniform basis and the book reserves may properly be de-

ducted in arriving at the correct rate base. If such consistent policies are not followed, regulation will inevitably collapse under the unequal strains which have been imposed.

(Signed) BASIL MANLY,
*Commissioner.*

Washington, D. C.,
May 26, 1942.

| | |
|---|---|
| City of Cleveland<br>Complainant<br>v.<br>Hope Natural Gas Company<br>Defendant | Docket No. G-100 |
| City of Akron<br>Complainant<br>v.<br>Hope Natural Gas Company<br>Defendant | Docket No. G-101 |
| Pennsylvania Public Utility Commission<br>Complainant<br>v.<br>Hope Natural Gas Company<br>Defendant | Docket No. G-127 |
| In the Matter of<br>Hope Natural Gas Company | Docket No. G-113 |

SCOTT, Commissioner, dissenting; in part:

This proceeding poses such a basic problem of regulation that I am constrained to dissent in part.

The majority has found a rate base in the amount of approximately $33,712,526, and has predicated the rates which it has prescribed upon the bases of allowing the Hope Company a return of 6½% upon that base.

Upon the record in this proceeding, I believe that the rate base for Hope Natural Gas Company can be reasonably determined not to exceed the sum of $17,662,792.[1] Using this figure as a predicate, a further reduction of some $1,040,000 in net revenue to Hope is clearly indicated.

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[1] It might even be set at a lower amount; see discussion on page two hereof.

It seems to me that this case is an appropriate one in which to establish the concept that true prudent investment in property of the utility dedicated to the public service, is a fair and proper rate base. In this regard, the recent decision of the Supreme Court in the *Natural Gas*

—2—

*Pipeline Company of America* case[2] affords ample authority for the use of prudent investment. The problem, then, is to determine what is the amount prudently invested by the Hope Company in the properties now devoted to public service. This problem does not appear too difficult.

The total cost of plant used and useful in the public service has been found by the Commission to be approximately $52,000,000.

The depreciation and depletion reserves, as of December 31, 1940, as shown on Hope's books, attributable to this property was approximately $38,377,750.[3] In addition, it should be noted that Hope has in the past transferred $7,552,919 from depreciation and depletion reserves to

—3—

earned surplus.[4] It is unquestioned that every single dol-

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[2] *Federal Power Commission, et al. vs. Natural Gas Pipeline Company of America, et al.*, 315 U. S. . . . ; 62 S. Ct. 736.

[3] The depreciation and depletion reserve per books at December 31, 1940, totals $46,654,691. $4,819,640 of this amount is attributable to the property of the Reserve Gas Company merged into Hope in 1939, but, as is pointed out by the majority in a footnote, the property and income of Reserve have been segregated and excluded for purposes of these proceedings. $1,866,887 of the reserve is applicable to distribution property with which we, of course, are not here concerned. $1,590,414 represents charges to the reserve by reason of adjustments made in plant accounts at December 31, 1938, but not recorded on the books. The book reserve, therefore, applicable to Hope's property with which we are concerned is thus $38,377,750. The deduction of this reserve from $51,957,416, cost as found by the majority, leaves $13,579,666, to which is added (per the majority opinion) $4,083,126 for net capital additions 1941, 1942 and 1943, useful unoperated acreage and working capital, making a total of $17,662,792.

[4] If correction be made for this transfer, the rate base would not exceed $10,109,873.

lar in the depreciation and depletion reserves (as well as the $7,552,919 transferred from those reserves to surplus) has been taken from gross operating revenues whose only source was the amounts charged customers in the past for natural gas. It is, therefore, a fact that *the depreciation and depletion reserves have been contributed by the customers* and do not represent any investment by Hope. Indeed, J. C. Chisler, Vice President and Treasurer of Hope, testified that it had been the company policy to retain revenues obtained through the medium of depreciation to finance and to develop its property.

The funds accumulated by such charges to operating expenses, the net total of which is represented by the amount in these reserves, have been used to build property now in service.

As was pointed out in the *Lindheimer case*:[5]

> "* * * According to the practice of the Company, the depreciation reserve is not held as a separate fund but is invested in plant and equipment. As the allowances for depreciation, credited to the depreciation reserve account, are charged to operating expenses, the depreciation reserve invested in the property thus represents, at a given time, the amount of the investment which has been made out of the proceeds of telephone rates for the ostensible purpose of replacing capital consumed. * * *"

—4—

It is proper, of course, that depreciation and depletion reserves should be accumulated from consumer payments for service to assure that the capital embarked in the enterprise by the utility owner shall remain unimpaired. But it is an equitable corollary of the duty which rests upon the consumer that he shall not be required to pay a return on amounts which, in fact, *he, rather than the owner of the utility, has contributed.*

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[5] *Lindheimer v. Illinois Bell Telephone Company*, 292 U. S. 151, 168.

The majority has very properly pointed out that property which has been constructed by past charges to operating expense, such as well drilling and overhead charges, should not be permitted to be capitalized for ratemaking—or for any other—purposes. This is based on the simple equitable principle that the customer should not be required to pay more than once. With this position of the majority, I am, of course, entirely in accord. Moreover, I can see no distinction between property which has been constructed by the company through charges upon the consumers by operating expenses labelled, for example, "well drilling expense" and property which has been constructed by the company through charges upon the consumers by operating expenses labelled "depreciation and depletion expense." In the latter case, equally with the former, the only amount *invested by the utility owner* in the business is the amount over and above the amount of property whose construction was paid for by operating expense charges. Consequently,

—5—

if we are setting as the rate base the prudent investment by the owner in the property, we should not permit the owner a return on something which quite patently he has not invested in the property.[6]

This principle is eminently fair in practice and is certainly not new in utility regulation. For example, in the case of *Re Mondovi Telephone Company*, P. U. R. 1933B, 319, the Wisconsin Commission concluded that:

> "* * * Customers who have unwittingly been financing property additions in the manner shown [by charges to operating expenses made by the company for capital additions] should not be expected to pay

[6] The same principle, of course, would apply to a so-called fair value rate base. In that case the only amount to be "valued" would also be the amount invested by the owner and not that amount contributed by the consumer.

rates which will allow a return on the property so paid for.'"[7]

—6—

Whether customer contributions be made directly for the purpose of building specific additions to plant or whether they be made somewhat indirectly but are likewise used for the construction of plant, there is no reason in either case why the customers, having contributed the funds to build the plant, should be required to pay to the utility company a return on the amount they have contributed.

In the *Mondovi case* the precise problem of deduction of the full depreciation reserve was also directly involved. The depreciation reserve was admittedly in excess of the existing depreciation in the property, i.e., the used-up service capacity of the property. But the Wisconsin Commission said:

"• • • The question now arises whether the entire [depreciation] reserve should be deducted from the property and plant account to arrive at a proper rate

[7] The exact facts as set out by the Commission were as follows:

"• • • year after year certain items of capital expenditure, notably wages of labor used in making additions to plant, were charged to operating expenses. The revenues received from subscribers, through the rates charged for service, more than covered these operating expenses, including items of expenditures for plant additions erroneously included in maintenance expense. In other words, the rates paid by subscribers were sufficient not only to pay running expenses but also to pay labor used in adding to the property. In addition, these rates provided a return enabling the company to pay dividends in every year except one during the past eighteen years, these dividends averaging just under 8 per cent on the stock outstanding during the 18-year period. The effect of including in the appraisals property so paid for and then using these appraisals in determining a rate base is to require customers to pay twice. Year after year, through these erroneous charges to operating expense, subscribers have been paying for plant additions, and now, if the appraisal values are used as a rate base, subscribers will be forced to pay a return on property already paid for by them.

"Such a result, in our opinion, would be grossly unfair. • • •"

base. Because of the fact that any excess in the reserve over and above an amount representing the used-up service capacity of the property is made up of 'involuntary' contributions on the part of the subscribers, we do not believe that the company is entitled to earn a return on property financed by such contributions. * * *"

The majority itself has pointed out that with respect to cost of property the Supreme Court of Appeals of West

—7—

Virginia has taken a position on consumer contributions to capital in the form of overheads which is identical with this one.[8]

Certainly the fact that not only the overheads but the direct cost, as well, of the property financed by the depreciation and depletion reserves have been contributed by the customers should emphasize the lack of equity in requiring the public to keep on paying a return on that which it has contributed to the property. There is neither fairness nor economic necessity in such a requirement.

Nor are we without specific authority of the United States Supreme Court on this exact point. In the case of *Louisiana R. R. Comm. v. Cumberland Tel. Co.*, 212 U. S. 414, the Court pointed out (p. 424):

"* * * It was obligatory upon the complainant to show that no part of the money raised to pay for depreciation was added to capital, upon which a return was to be made to stockholders in the way of dividends for the future. It cannot be left to conjecture, but the burden rests with the complainant to show it. It certainly was not proper for the complainant to take the money, or any portion of it, which it received as a result of the rates under which it was operating, and

[8] *City of Wheeling v. Natural Gas Co. of W. Va.*, 115 W. Va. 149, 175 S. E. 399, 5 P. U. R. (N. S.) 471; *Natural Gas Company of West Virginia v. Public Service Commission*, 95 W. Va. 557, 121 S. E. 716, P. U. R. 1924D, 346. See also *Re Reedsburg Telephone Company*, 7 P. U. R. (N. S.) 389, 395.

so to use it, or any part of it, as to permit the company to add it to its capital account, upon which it was pay-

—8—

ing dividends to shareholders. If that were allowable, it would be collecting money to pay for depreciation of the property, and, having collected it, to use it in another way, upon which the complainant would obtain a return and distribute it to its stockholders. That it was right to raise more money to pay for depreciation than was actually disbursed for the particular year there can be no doubt, for a reserve is necessary in any business of this kind, and so it might accumulate, but to raise more than money enough for the purpose and place the balance to the credit of capital upon which to pay dividends cannot be proper treatment. * * *"

What the Court there condemned is what Hope claims here.

The majority has found that $22,328,016 is money enough for the purpose of a reserve for depreciation. It also appears from the record that Hope has accumulated $16,049,734 more than enough for this purpose, or $23,602,653 more than enough if adjustment be made for the transfers from depreciation and depletion reserves to surplus. This balance of approximately $23,600,000 the majority permits Hope to place to the credit of capital upon which dividends may be paid—a result which the Supreme Court in the *Cumberland Telephone Company Case, supra*, unequivocally states "cannot be proper treatment." Certainly it cannot be gainsaid that Hope has taken this portion of the depreciation and depletion money which it received as a result of the rates under which it was operating and has so used it "as to permit the company to add to its capital account upon which it was paying dividends to shareholders." Hope has done this for practically its

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entire history. It seems to me that simple justice to the consumers demands that we follow the injunction of the

Supreme Court and call a halt to this unjustified exploitation of the public.[9]

The Supreme Court, in the *Lindheimer case, supra*, appears clearly to support my conclusions when it said at page 169:

> "* * * But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered and thus to keep its investment unimpaired, but to secure additional plant and equipment upon which the utility expects a return."

I can find no justification whatever for permitting Hope to continue to make profits upon capital which it has required the public to contribute to its business. We, certainly, are under no constitutional compulsion or requirement to permit Hope longer to take such profits. For, as Chief Justice Stone stated in the *Natural Gas Pipeline Co. of America* case:



> "* * * The Constitution does not require that the owner who embarks in a wasting asset business of limited life shall receive at the end more than he has put into it. * * *"

Obviously, the fictional character of the company's claim of *property* permeates any suggestion of confiscation. There can be no confiscation of *property* when the prop-

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[9] The case of *Board of Public Utility Commissioners v. New York Telephone Co.*, 271 U. S. 23, is in no way contrary to this position. As was pointed out by the West Virginia Supreme Court of Appeals in *Wheeling v. Natural Gas Co., supra*: "An examination of that case shows that the board of commissioners had directed the company to make up current losses out of reserves accumulated in the past. No question was raised there in regard to including property in the rate base which had theretofore been paid for out of operating expenses."

erty claimed taken is made up of "involuntary" contributions on the part of consumers.

Over its entire history, the investors in Hope have earned extraordinarily generous returns upon their invested capital.[10] The entire investment in Hope, as pointed out in the majority opinion, is represented by capital stock. From its very inception through 1940 the investors have received in cash dividends an annual average of 20% on the average amount of capital stock issued for cash or other assets.

Part of the stock of Hope now outstanding represents common stock dividends issued from time to time, and it appears that Hope has paid over its entire history average annual cash dividends of approximately 13 to 14% on all its common stock, including not only stock issued for cash or assets but also stock issued as dividends. Its depreciation and depletion reserve has been built up *after* such earnings were paid out. Obviously, a utility company

—11—

which has existed for 43 years—through several major economic erises in the country—with such an extraordinary rate of earnings can hardly claim in any good conscience to be entitled to continue to make additional returns upon sums patently *contributed by its customers.*

The prudent investment doctrine as classically expounded by Mr. Justice Brandeis in the *Southwestern Bell case*[11] was designed to afford the utility investor assurance that he would always receive a fair return upon his investment and to save the consumer from being required to pay a return upon any increment above that investment. It was never intended to serve as a method by which the utility investor was to be permitted to earn a return upon funds or property contributed by someone other than himself.

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[10] During period 1908-1940, $97,273,640 in cash dividends have been paid by the Hope Company.

[11] 262 U. S. 276, 289.

Mr. Justice Brandeis pointed out almost at the very outset of his opinion that:

> "* * * The thing devoted *by the investor* to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise. * * *
>
> "The investor agrees, by embarking capital in a utility, that its charges to the public shall be reasonable. * * *"

The basic theme of the entire opinion is that the amount upon which the investor is entitled to earn is *his* investment in the utility and no more. This is so patently fair to all concerned that it should require no further comment.

—12—

This case may seem like a hard one in which to apply this very fundamental and sound principle because of the fact that its application would result in the reduction of the rate base to a comparatively low figure. But there is no injustice in limiting the company to a return on *its investment*, while there is, on the other hand, great inequity in requiring, as does the majority, the consumers to pay a return on some sixteen to over twenty-three and a half millions of dollars which they have contributed to the building of the Hope system.

For these reasons I believe that the rate base should here be the cost of property used and useful in furnishing service, less the actual depreciation and depletion reserves attributable to such property.

(Signed) JOHN W. SCOTT,
*Commissioner.*

Washington, D. C.,
May 26, 1942.

## 4. COMPLETE LIST OF EXHIBITS BY ABBREVIATED TITLES CLASSIFIED BY SUBJECT MATTER.

| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
|---|---|---|---|

### I. THE COMPANY'S PROPERTIES AND OPERATIONS.

#### (A) Maps.

| | | | |
|---|---|---|---|
| 1 | Tonkin: Map of Hope, East Ohio, Peoples and River systems | 41 | Hayne: Map of Hope's system |
| 1-A | Tonkin: Reduced scale copy of Ex. 1 | 41-A | Hayne: Statement explaining Ex. 41 |
| 3 | Tonkin: Interval maps showing development of Hope's properties | 72 | Hayne: Gas flow maps |
| 3-A | Tonkin: Reduced scale copies of Ex. 3 | 72-A | Hayne: Statement explaining Ex. 72 |

#### (B) Export Sales Contracts.

| | | | |
|---|---|---|---|
| 5 | With East Ohio | 47 | Shattuck: Specified conditions of service in Hope's filed rate schedules |
| 6 | With Peoples | | |
| 7 | With River | | |
| 8 | With Fayette | | |
| 9 | With Manufacturers | | |

#### (C) History of Operations.

| | | | |
|---|---|---|---|
| 4 | Tonkin: Hope's properties, markets, sources of gas supply and development of its properties: Explanation of Exs. 1, 2 and 3 (Printed at page 103 below) | | |

#### (D) Gas Sales and Other Statistics.

| | | | |
|---|---|---|---|
| 2 | Tonkin: Hope's properties, markets and sources of gas supply, 1898-1938 | 48 | Shattuck: West Virginia sales of 12 utilities, 1937-1939 |
| 2-A | Tonkin: Vendors' wells supplying gas to Hope | 49 | Shattuck: West Virginia gas purchase prices |

| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
|---|---|---|---|
| 2-B | Tonkin: 1939-1940 statistics supplementary to Ex. 2 | 69 | Lyon: Gas handled annuall 1899-1939 |
| 2-C | Tonkin: Hope, East Ohio and Peoples' domestic and industrial sales, 1937-1941 | 69-A | Lyon: Gas handled, 1940 |
| 120 | Moorhead: Errors in Ex. 69 | 70 | Lyon: Annual and month sales, 1934-1939 |
| 120-A | Moorhead: Table 1 of Ex. 69 corrected | 70-A | Lyon: Peak day sales, 19 1939 |
| | | 70-B | Lyon: 1940 supp ment Exs. 70 and 70-A |
| | | 71 | Lyon: Graph of Hope's dai deliveries, 1933-1941 |

## (E) Gas Reserves and Methods of Gas Exploration.

| | | | |
|---|---|---|---|
| 15 | Tollefson: Remaining gas reserves of operated acreage as of Dec. 31, 1938 | 10 | Definition of operated and u operated acreage |
| 15-A to 15-Q | Tollefson: Sand area maps | 41 | Hayne: Map of Hope's s tem showing "pool areas" |
| 23 | Tollefson: Methods of gas exploration | 41-A | Hayne: Statement explainin Ex. 41 |
| 26 | Rhodes: Leasehold costs of gas produced | 43<br>43-A<br>43-B | Ross: Remaining gas reserv of operated acreage as of De 31, 1938 and past productio |
| 44 | Ross: Sand pool maps from Ross' working papers | 51 | Ross: Remaining gas reserv of operated acreage as of De 31, 1939 and past productio |
| 45 | Tollefson: Maps showing certain new wells drilled since 1938 | 51-A | Ross: Corrections to Ex. 51 |
| 46 | Ross: List of dead wells on dead leases from Ross' working papers | 64 | Whitney-Dunn: Explorati and development costs, 19 1939 |
| 52 | Tollefson: Map showing certain 1939 drilling | 80 | Ross: Analysis of unoperate acreage |

| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
|---|---|---|---|
| 53 | Ross: Differences between Ross' 1938 and 1939 total recoverable gas reserve estimates for certain pool areas | | |
| 54 | Ross: Differences between Ross 1938 and 1939 individual well total recoverable gas reserve estimates | | |
| 55 | Ross: Working papers supporting Ex. 51 | | |

### (F) Miscellaneous.

| | | | |
|---|---|---|---|
| 25 | U. S. Dept. of Labor report on residential rates for gas in 50 cities, 1935-1939 | 34 | West Virginia Commission letter to F. P. C. on leakage |
| 42 | Hayne: Changes in Company wells in 1939 not reflected on map Ex. 41 | 40 | Stipulation that Hope is a natural-gas company under the Natural Gas Act |
| 42-A | Hayne: Corrections to Ex. 41-A | 50 | Ryan: Typical monthly bills for domestic gas service in cities of population of fifty thousand and more |
| 93 | Tollefson: New wells drilled, purchased and drilled deeper, 1939-1941 | | |
| 118 | Tonkin: Future capital expenditures, 1941-1943 | 81 | Nichols-Dunn: Corporate history |

## II. RATE BASE.

### (A) Original Cost and Adjusted Book Cost.

| | | | |
|---|---|---|---|
| 11 | Chisler: Balance sheet and income account, 1929-1938 | 20-A | Antonelli: Summary of general overheads included in original cost |
| 20 | Antonelli: Original cost of Company's properties (Printed at page 167 below) | Oral | Smith: Construction of F. P. C. code of accounts, R. 2702-2755 (Printed at page 225 below) |
| 28* | Antonelli: Amounts originally expensed which are included in original cost | Oral | Smith: Principles of depreciation, R. 2826-2834 (Printed at page 373 below) |

* Offered by Cleveland in connection with its cross-examination (R. 1434).

| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
|---|---|---|---|
| 59 | Antonelli: Comparison of original cost with F.P.C. adjusted book cost (Printed at page 347 below) | 57 & 57-A | Pace-Dunn: Original co (adjusted book cost) (Print ed at page 209 below) |
| 60 | Antonelli: Inventory of direct material and labor costs excluded in F. P. C. examiners' adjusted book cost | 61 | Dunn: Depreciation and d pletion of gas plant at De 31, 1938 |
| 89 | Dunn: Estimated abandonment costs not charged to depreciation reserves | 68 | Nichols-Dunn: 1938 balan sheet per books and as a justed |
| 98 | Antonelli: Principal property purchases, 1898-1938, and method of recording on books | 75 | Pace-Dunn: Reconciliation o original cost per Compan and per F.P.C. examiners |
| 99 | Antonelli: Data furnished F.P.C. at its request showing for major accounts costs expensed and included in the original cost | 76 | Dunn: 1939 additions and re tirements |
| 131* | Sullivan: Figures presented by Cleveland as to original cost less depreciation | 78 | Dunn: Operations data fo 1940 |
| 137 | Kennedy: Necessary adjustments to F.P.C. examiners' computed depreciation reserves as of Dec. 31, 1938 | | |
| 138 | Kennedy: Necessary adjustments to F.P.C. examiners' computed depreciation reserves as of Dec. 31, 1939 | | |
| | **(B) Original Cost Trended to Present Prices.** | | |
| 20 | Antonelli: Original cost trended to 1938 prices (printed at page 167 below) | 74 | Gough: Report on origina cost trended to 1938 prices |
| | | 74-A | Gough: Chart on price trend |

* Offered by Cleveland in connection with its cross-examination (R. 6616).

| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
|---|---|---|---|

## (C) Reproduction Cost New and Less Depreciation.

| | | | |
|---|---|---|---|
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| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
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| Exhibit Number | Offered By Company | Exhibit Number | Offered By F. P. C. Staff |
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# STATEMENT OF POSITION AND EXPERIENCE OF LORING L. TONKIN

**1. Name, address and age**

Loring L. Tonkin, 701 Milford Street, Clarksburg, West Virginia, age 52.

**2. Education**

High school, Oil City, Pennsylvania; graduated from Phillips Academy, Andover, Massachusetts, in 1908 and from Cornell University, Ithaca, New York, in 1912 with the degree of Mechanical Engineer.

**3. Present position**

President, General Manager and Director of Hope Natural Gas Company.

**4. Experience**

While attending school and college I worked every summer from 1903 to 1911 for Hope Natural Gas Company and affiliated gas companies on compressor station and pipe line construction. In June 1912 I went to work permanently for Hope Natural Gas Company serving first as Meter Engineer (1912) and successively as Assistant Engineer in the Company's compressor station department (1913-1915); Division Engineer in charge of construction and operation of compressor stations (1915-1918); Assistant Chief Engineer and Chief Gas Dispatcher (1919-1920); Chief Engineer, Assistant General Superintendent and Chief Gas Dispatcher (1920-1932); Vice President, Chief Engineer and Director (1932-1939); and President, General Manager and Director from February 1939 to date.

—2—

In the course of my services for the Company I have from time to time had charge of substantially all branches

of its operations, including the operation and construction of compressor stations, the dispatching of all of its gas, the operation of its trunk line system, the operation of its distribution plants, the operation of its wells and of its leasing, drilling and other field activities.

—3—

## WRITTEN STATEMENT OF LORING L. TONKIN

### A. Matters Covered By This Exhibit

1. The Hope Company's principal sales are as follows:

| *To* | *1938 Sales (M.c.f.)* |
|---|---|
| The East Ohio Gas Company | 30,316,773 |
| The Peoples Natural Gas Company | 2,870,545 |
| The River Gas Company | 222,615 |
| Fayette County Gas Company | 837,986 |
| The Manufacturers Light & Heat Company | 4,772,083 |
| West Virginia domestic, industrial, field and other consumers | 8,900,612 |
| Total | 47,920,614 |

2. Of these companies East Ohio, Peoples and River are wholly owned subsidiaries of Standard Oil Company (New Jersey) as is the Hope Company. Fayette and Manufacturers are not affiliated with the Company in any way.

3. There have been prepared by me or under my supervision from the books of the Company and its affiliated companies the following Company exhibits:

Co.X.1 —Map of Main Pipe Line Systems of Hope Natural Gas Co., The East Ohio Gas Co., The Peoples Natural Gas Co. and The River Gas Co.—1939.

Co.X.1A—Reduced Scale Copy of Company Exhibit No. 1.

Co.X.2 —Hope Natural Gas Company—statistics as to the Company's Properties, Markets and Sources of Gas Supply.

Co.X.3 —Hope Natural Gas Company—Interval Maps Showing the Development of the Company's Properties:

Map No. 1—1901
Map No. 2—1906
Map No. 3—1911

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Map No. 4—1916
Map No. 5—1921
Map No. 6—1926
Map No. 7—1931
Map No. 8—1936
Map No. 9—1939

Co.X.3A—Reduced Scale Copies of Company Exhibit No. 3.

Co.X.4 —This exhibit explaining Company Exhibits Nos. 1, 2 and 3.

4. This written statement will describe generally the Company's properties, markets, sources of gas supply and its operations, and will trace briefly the development of its properties, referring frequently to these exhibits by the indicated abbreviations.

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**B. General Descriptions Of The Properties Shown On The Main Pipe Line System Map, Co.X.1**

1. Co.X.1 (and its reduction, Co.X.1A) shows parts of the States of West Virginia, Pennsylvania and Ohio with the main pipe line systems of the Hope, East Ohio, Peoples and River Companies as of December 31, 1938 shown thereon.

2. In Ohio there is shown by dark blue lines the main transmission system of East Ohio starting at the Ohio River at Clarington and Round Bottom Measuring Stations and running north through the Canton, Massillon and Akron area to Cleveland, with easterly lines over to the

Youngstown district and southwesterly lines from the Danville and Wooster territory. East Ohio serves about 495,000 domestic consumers located in the Cleveland metropolitan area and in the other Ohio cities shown by green dots on the map, a total of 64 municipalities.

3. In Pennsylvania there is shown in light blue lines the main transmission system of Peoples. This system supplies the Pittsburgh district with part of its gas, has an easterly extension to Altoona and Tyrone, northerly extensions into Butler, Armstrong, Clarion, Jefferson and Elk Counties and a northwesterly extension which connects with the East Ohio system at the Pennsylvania-Ohio state line. This latter is used when necessary during winter peak load periods for the delivery of Hope gas to East Ohio at the Pennsylvania-Ohio state line. During 1938 the Peoples Company had about 124,000 domestic consumers located in a portion of Pittsburgh and in the other Pennsylvania cities indicated in green on the map, and now has about 149,000 domestic consumers by reason of the merger of The Columbia Natural Gas Company with Peoples at the end of 1938.

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4. In the southeastern section of Ohio near the Ohio River are shown some scattered properties colored in maroon owned by The River Gas Company. This is a small company with about 9,000 consumers in Marietta and the other Ohio cities and villages shown in green on the map.

5. The pipe lines of the Manufacturers and Fayette Companies are not shown on C.X.1. Both are gas companies distributing natural gas in various municipalities, Manufacturers in Pennsylvania, West Virginia and Ohio and Fayette in Pennsylvania.

6. In addition to selling gas to these five companies, Hope distributes natural gas in various communities in West Virginia, serving about 42,000 domestic consumers. The Company's principal distribution plants in West Vir-

ginia are at Clarksburg, Parkersburg, Weston, Mannington, Salem and Sistersville. The small green areas marked on the map indicate the larger of these distribution plants.

7. The Hope Company's deliveries to East Ohio are made at the West Virginia-Ohio state line at two points, near Clarington and near Round Bottom Stations on the Ohio River, where Hope's lines connect with those of East Ohio. Its deliveries to Peoples are made at the West Virginia-Pennsylvania state line at a point immediately south of the Brave Compressor Station of the Peoples Company and also near the southwest corner of Pennsylvania as indicated on Co.X.1. Its deliveries to the River Company are made at the West Virginia-Ohio state line at a number of points along the Ohio River between Parkersburg and Sistersville, but principally at Marietta, Ohio. Deliveries to the Fayette Company are made at the West Virginia-



Pennsylvania state line at Wade Measuring Station and to the Manufacturers Company at Bates Measuring Station in northeastern Doddridge County, about 14 miles southeast of the Company's Hastings Compressor Station.

8. The properties of the Hope Company shown on Co.X.1 are its principal pipe lines, generally from 8 inch up to 20 inch in diameter, and its 47 active compressor stations. The pipe lines indicated in red, called "field lines" on the map, are the principal lines leading from a network of small gathering lines in the field to compressor stations. The lines indicated in green, called "transmission lines" on the map, carry the gas between the various compressor stations and from the compressor stations to points of delivery principally along the Ohio River and the Pennsylvania state line. The red squares indicate the Company's compressor stations, the largest being Hastings, approximately twenty miles southeast of the Ohio River. Hastings is the largest natural gas compressor station in the world.

9. The function of the Company's pipe line and compressor station system is to collect gas from its approximately 3,300 gas wells and from its 340 purchase contracts and to pump and transport that gas in a northerly direction and deliver it at the points of delivery heretofore described. Except for the local distribution systems shown by the green areas on the map and other smaller West Virginia communities these deliveries are all made to the north along the Ohio River, the Pennsylvania state line and at Bates in Doddridge County. It will be noted that the transmission system runs from the southern boundary of Boone County generally north to the delivery points heretofore noted. The pipe line distance from Clothier in Boone

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County to Clarington and Round Bottom Stations on the Ohio River is over 178 miles. Each of these principal lines shown on the map is identified by a symbol. For example, the westerly discharge line leading from Hastings Compressor Station to Clarington on the Ohio River is marked H-106-20". This means Hope's line No. H 106, 20 inches in diameter.

10. The Company's gathering lines and wells and the points of receipt of gas from contract vendors are not shown, inasmuch as on a map of this size, these lines, wells and points of delivery would show as a solid network and would make the map illegible.

11. As shown on page 1 of Co.X.2 the Hope Company's actual mileage of pipe lines and their 3" equivalents as of the date of this map are as follows, classified in accordance with the Company's accounting records:

| | *Pipe Line Miles* | *Miles of 3" Equivalent* |
|---|---|---|
| Field lines | 2,381 | 5,076 |
| Transmission lines | 1,043 | 4,469 |
| Distribution lines | 892 | 929 |
| Total | 4,916 | 10,474 |

12. A word of explanation as to what is meant by "3-inch equivalent." The diameters of these various field and transmission lines range all the way up to 20 inches. It is, of course, misleading to compare a mile of 4-inch pipe, for example, with a mile of 20-inch pipe. To have some common equivalent to which all lengths of pipe is reduced it has become accepted practice in the industry to reduce everything to a 3-inch equivalent, i.e. a mile of 6-inch pipe is considered approximately two miles of 3-inch pipe, a mile of 18-inch pipe is considered approximately six miles of 3-inch pipe, etc.

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13. As likewise shown on page 1 of Co.X.2 the Company's 47 compressor stations shown on Co.X.1 have a total installed horsepower of 93,470. As shown on page 1A, these stations vary in size from very small compressor stations located in the field, such as the Seth Station in Boone County with an installed horsepower of 180, to the Company's principal compressor station at Hastings in Wetzel County with an installed horsepower of 29,225.

14. Page 1 of Co.X.2 shows the other data as to the Company's properties which could not be shown on Co.X.1. As of December 31, 1938 it had 3,302 gas wells, 337,790 operated acres and 647,180 unoperated acres. These gas wells and gas leaseholds are widely scattered, principally through the central and northern parts of the West Virginia gas field in which the Company operates. The 340 contracts under which the Company buys gas supply gas to the Company from approximately 12,600 gas and combination gas and oil wells in addition to the gas wells owned and operated by the Company. Gas is received from these contract vendors at about 425 delivery points throughout the system with about 75% of the Company's purchased gas being delivered to it in the southern part of the system from Cabot Station in Calhoun County south.

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## C. Hope's Gas Sales Obligations

(a) *Priorities in obligations*

1. The Company's distribution of natural gas in West Virginia is as a natural gas utility under the jurisdiction of the Public Service Commission of West Virginia. It serves in 22 West Virginia cities and towns, of which Clarksburg and Parkersburg are by far the largest, and in about 200 very small West Virginia communities. This local service in small cities and communities is a necessary incident of the Company's production activities. Columns (2) to (6) of page 2 of Co.X.2 indicate the extent of its sales in West Virginia, divided between domestic and commercial, industrial and field and other sales. The Company's approximately 42,000 domestic consumers in West Virginia have a primary right to be served in the event its available gas supply is not sufficient to meet all of its obligations. The Company's other sales in West Virginia are subject to curtailment in favor of domestic consumers of Hope in West Virginia and of domestic consumers of East Ohio and Peoples as hereinafter noted.

2. It will be observed from an examination of page 2 of Co.X.2 that the Company's West Virginia sales constitute a relatively small portion of its total business. All of these sales are made pursuant to rates subject to the jurisdiction of the West Virginia Commission and in accordance with the tariff schedules on file with that body.

3. The major portion of the Company's business consists of meeting its contractual obligations to East Ohio, Peoples, River, Fayette and Manufacturers, gas sold under these contracts moving out of the State of West Virginia

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into the States of Ohio and Pennsylvania except for part of the gas sold to Manufacturers. A true copy of each of the Company's present contracts with these companies, as

on file with the Federal Power Commission as rate schedules under the Natural Gas Act, is made an exhibit in this case. These contracts are as follows:

| | |
|---|---|
| With The East Ohio Gas Company | Co.X.5 |
| With The Peoples Natural Gas Company | Co.X.6 |
| With The River Gas Company | Co.X.7 |
| With Fayette County Gas Company | Co.X.8 |
| With The Manufacturers Light & Heat Company | Co.X.9 |

4. The relative order of magnitude of the Company's sales under these contracts and under preceding contracts with these same companies is likewise shown on page 2 of Co.X.2. It will be observed by comparison of column (11) with the other columns on this page that Hope sales to East Ohio have for many years constituted far more than half of its total annual sales except for the years 1930 to 1934 when they dropped to about one half of the total sales. Hope's annual deliveries to the other four companies are very much smaller individually and in the aggregate than its sales to East Ohio.

5. While the terms of these five contracts are self-explanatory several general observations can be made. Under all of them Hope's first obligation is to supply the requirements of its domestic consumers in West Virginia. By its contracts with East Ohio and Peoples the Hope Company has obligated itself to supply the requirements of domestic consumers of those two companies and in case of shortage, after supplying its own domestic consumers, to



cut them back ratably in proportion to the number of domestic consumers attached to their lines. The gas sold by Hope, East Ohio and Peoples for industrial purposes is all subject to curtailment and has been curtailed whenever necessary to meet the demands of the domestic consumers of Hope, East Ohio and Peoples. Hope's contract with River specifically makes its requirements subject to the

prior rights of the domestic consumers of Hope and to Hope's obligations to East Ohio and Peoples. Its contracts with Fayette and Manufacturers specifically subject their requirements to the prior rights of the domestic consumers of Hope, East Ohio and Peoples. In other words, whenever necessary to supply the requirements of the domestic consumers of Hope, East Ohio and Peoples, deliveries to River, Fayette and Manufacturers may be curtailed.

6. Page 3A of Co.X.2 shows the number of the domestic and commercial consumers of Hope, East Ohio and Peoples for the individual companies and in total from 1899 to 1938. It is these consumers which Hope is under a primary obligation to supply.

(b) *Quantities required to be delivered*

1. Generally as to the quantities of gas which Hope is obligated to deliver under these contracts, Hope has an open commitment as to both East Ohio and Peoples to supply the requirements, whatever they may be, of the domestic consumers of these companies. In practice this obligation has been interpreted to mean all the requirements of East Ohio and Peoples that they are unable to satisfy from their respective fields in Ohio and Pennsylvania. This has resulted



in wide variations in the demands of these two companies from year to year, from month to month, from day to day, and from hour to hour.

2. In the case of River, Hope is obligated to meet the requirements of River's consumers in various Ohio cities and towns to the extent that River does not obtain its supply from other sources. In recent years Hope has supplied an average of about 30% of River's annual requirements. This is a small company and no substantial annual quantities of gas are involved, as will be seen from examining column (9) on page 2 of Co.X.2.

3. In the case of Hope's contracts with Fayette and Manufacturers, provision is made in each contract for a specified annual quantity of gas to be delivered by Hope and specified percentages of this total annual quantity to be delivered in each month and from day to day. The present Fayette contract specifies the annual quantity at 850,000 M.c.f. and the Manufacturers contract specifies the total annual quantity to be delivered by Hope at 2,500,000 M.c.f. until April 30, 1940 and at 2,000,000 M.c.f. annually during the next two years. The result is that under these contracts with Fayette and Manufacturers, Hope knows precisely what deliveries it is expected to meet annually, each month and from day to day, whereas in the case of East Ohio and Peoples these quantities are not known.

(c) *Pressure obligations*

1. In addition to the differing quantities of gas which Hope is obligated to deliver under these five contracts mention should be made of the differences in delivery



pressures. Under its contract with East Ohio, Hope is required to deliver gas at a pressure where its lines join the lines of East Ohio of at least 225 pounds and in practice for many years deliveries have been made in the winter season at pressures between 285 and 300 pounds. The final compression necessary to accomplish these deliveries occurs largely at the Hastings Station where the discharge lines to the Ohio River carry pressures up to 325 pounds. Additional deliveries by Hope to East Ohio in times of peak demand are made through the Peoples system, which connects with the East Ohio system at Petersburg south of Youngstown, Ohio. All gas sold by Hope to East Ohio is delivered to East Ohio at sufficient pressure so that it will flow through East Ohio's lines to consumers' burner tips throughout the East Ohio system. East Ohio does not further compress any of the gas it purchases from Hope. On

maximum peak days Hope delivers to East Ohio at Clarington and Round Bottom Stations on the Ohio River up to 165,000,000 cubic feet and at Petersburg around 8,000,000 to 9,000,000 cubic feet additional. On gas delivered to East Ohio at Petersburg, Hope pays Peoples a compressing and transportation charge.

2. Under its present contract with Peoples, Hope is obligated to make deliveries to Peoples at such pressure as Peoples may from time to time request and as can be maintained by Hope without increasing its pipe line or compressor station capacity. Most of the deliveries to Peoples are made at pressures varying from about 50 to 160 pounds directly into the suction lines of Peoples' Brave Compressor Station, where the gas purchased from Hope is compressed sufficiently to transmit it to Peoples' markets. In addition deliveries are made through Hope's lines H



29-8" and H 27-10", which are connected to lines of the Peoples Company feeding into the low stage pumps at Brave Station. These low stage pumps pull the pressure on these lines of Hope down to about 5 pounds. In other words, the gas delivered through these two Hope lines is drawn out of the Hope lines and wells directly by compressors at the Peoples' Brave Station. This particular gas has to be pumped twice by the Peoples Company at its Brave Station to reach its markets. In periods of extreme demand, deliveries are also made to Peoples through Hope's line H 6-16" from Hastings Compressor Station, at state line pressures of about 100 pounds. Normally this line serves as a suction line into Hastings Station. When deliveries are made through this line to Peoples, it further compresses this gas at Brave Station to reach its markets.

3. The prices fixed in both the East Ohio and Peoples contracts contemplate delivery of gas by Hope with pressures sufficient to reach the consumers served by these two companies. Since Hope's deliveries to Peoples are not at

sufficient pressure to reach Peoples' markets and Peoples must compress the gas purchased from Hope at its Brave Compressor Station, the contract with Peoples provides for payment by Hope to Peoples of 3¢ per M.c.f. so long as Peoples maintains its Brave Compressor Station.

4. Hope's delivery pressure obligations under its contract with River read substantially like those of its contract with Peoples and in practice deliveries are made at pressures of about 35 pounds.

5. Hope's Fayette contract provides that delivery pressures will be sufficient to meet the requirements of



Fayette, which in practice has meant deliveries at field pressures of about 60 to 100 pounds at the delivery point at Wade on the West Virginia-Pennsylvania state line.

6. For several recent years Fayette has taken gas from an isolated Peoples system well in Fayette County, Pennsylvania, and Peoples has secured an equivalent amount of gas from Hope without charge over and above its contract takings. The gas so exchanged is billed as if delivered by Hope to Fayette at Wade.

7. In the case of Manufacturers, Hope's delivery pressure obligation is specified at not less than 60 pounds and in practice deliveries are made at field pressures ranging from about 60 to 70 pounds. It will be recalled that these deliveries are made at Bates in Doddridge County, West Virginia in the middle of Hope's own production system. These deliveries go immediately into the suction lines of Manufacturers' Sedalia Compressor Station which pumps this gas and Manufacturers' own local supplies for delivery in Pennsylvania and elsewhere.

(d) *In general*

1. From this brief review it will be noted that Hope's contract obligations both as to quantities and delivery

pressures vary substantially between its five major gas sales contracts, with its obligations to East Ohio and Peoples and its delivery pressures to East Ohio calling for substantially greater service than in the case of the other contracts.

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## D. Annual Demands Resulting From Hope's Gas Sales Obligations

1. In view of the character of the Company's gas sales obligations, particularly its open-end obligations to East Ohio and Peoples, it is apparent that the extent of the demands upon the Company's system must be determined by an analysis of what has actually happened in addition to what the Company's various contracts say. This analysis requires an examination of the statistics as to both the annual demands upon the Hope Company's system and the peak load demands. This portion of this exhibit deals with the annual demands upon the Company's system and the next portion will discuss the peak load problem.

2. Co.X.2 at pages 2 to 9 sets forth the statistics as to these annual demands both in statement and chart form.

(a) *Annual demands from West Virginia consumers*

1. On page 2 of Co.X.2 there is shown the number of West Virginia consumers of Hope, the amount of gas sold in West Virginia for various purposes and in column (6) the total West Virginia sales, for the 40-year period 1899 to 1938. It will be noted from columns (2) and (3) that the number of domestic and commercial consumers as well as the amount of domestic and commercial sales has gradually increased over the years and Hope now supplies annually about 4½ billion feet to its own 42,000 consumers.

2. Column (4) shows the West Virginia industrial sales of Hope. In 1921, due to the depression of that year, industrial sales fell sharply. They did not again reach their pre-1921 level until 1936 and 1937. These West Vir-

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ginia industrial sales are largely steady load gas, principally because of the glass and some other similar industries whose normal operations are continuous.

3. In column (5) it will be noted that from 1902 to 1908 Hope's West Virginia field sales were very large, reaching a peak of 20 billion feet in 1904. They have now declined to less than 1 billion feet per year. In the boom period of oil and gas exploration in West Virginia large amounts of gas were sold in the field for drilling operations. It was burned in huge quantities under boilers. With the boom period over, there is no longer the demand for this gas in the field.

4. Column (6) shows Hope's total West Virginia sales. The relatively small proportion of Hope's total sales represented by these West Virginia sales appears from a comparison of columns (6) and (12). The chart on page 3 of Co.X.2 illustrates these figures, the various shades of blue representing the Company's various West Virginia sales.

(b) *Annual demands from Manufacturers and Fayette*

1. These two companies both belong to the Columbia Gas & Electric group. The only precise statistical information Hope has available as to them is its sales to each of these companies. Published reports, however, show that Manufacturers secures the greater part of its supply from sources other than Hope. Hope's yearly sales to these companies are set forth in columns (7) and (8) on page 2 of Co.X.2 and in graph form on page 3. It will be noted that the annual sales to Manufacturers were rather stead-

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ily around 9 billion feet from 1910 to 1915, both inclusive; then for two years were at 14 billion feet; for two more years at 12 billion feet; for two more years at 11 billion feet; for the succeeding ten years from 1922 through 1931

they were around 10 billion feet and in recent years have been from approximately 7 to 5 billion feet. It will also be noticed from column (8) that Hope's sales to Fayette County Gas Company follow a similar uniform pattern, the sales of the last ten years being less than 1 billion feet each year.

2. The reason for this consistency in groups of years is that the quantities to be delivered by Hope each year to Manufacturers have always been fixed in advance under the contract. The same situation has been true of the Fayette deliveries for many years. In the case of East Ohio and Peoples, however, Hope's obligation is to supply the requirements of their domestic consumers whatever these may be. A glance at the chart on page 3 of Co.X.3 will show that this open obligation to East Ohio and Peoples has produced great fluctuations up and down over the years in the sales by Hope to East Ohio and Peoples.

(c) *Annual demands from River*

1. The River Company was not physically connected with the Hope Company's lines until the year 1910 in which year Hope made its first deliveries to River. Co.X.2, pages 2 and 3, shows that Hope's annual sales to this small company have always been a minor portion of its total business.

2. In Co.X.2, page 4, is set forth the statistical information as to the amount of gas handled year by year,



by the River Company and the source of that gas. It will be noted that while the River Company procured the major part of its supply from Hope down to and including the year 1921, since that time it has procured the bulk of its supply from its own production and purchases and that in the year 1938 it purchased from Hope less than ¼ billion feet. This same data is shown in chart form on page 5 of Co.X.2.

(d) *Annual demands from Peoples*

1. While the Peoples Company had been in business since 1885 it was not until 1904 that its lines were connected with those of Hope and deliveries of West Virginia gas began. The general territory in which Peoples operates has already been described. It had on December 31, 1938, nearly 124,000 (now by consolidation with another company, 149,000) consumers attached to its lines and in the last five years has handled an average of 17 billion feet annually of which 22% was purchased from Hope.

2. In Co.X.2, page 6, is set forth the total amount of gas handled by Peoples from 1903 to 1938, both inclusive, and the amount and percentage of that gas purchased from Hope and produced and purchased in Pennsylvania. This data is shown in chart form on page 7. Note that this Peoples chart is shown in billions of cubic feet per year, as is the subsequent East Ohio chart, whereas the preceding River chart was shown in millions of cubic feet.

3. Column (4) of page 6, Co.X.2 shows that the demand upon Peoples for gas was generally upward from



1903 until it reached a peak in the year 1916. In that year Peoples marketed almost 41 billion feet. From this point Peoples' sales dropped in three years to less than 26 billion feet and following the depression of 1921 remained in the neighborhood of 20 billion feet until the depression of 1931. From 1931 to 1935 they dropped to 15 billion feet or less, went up to nearly 21 billion feet in 1937 and in the year 1938 were again 15 billion.

4. Peoples' maximum annual sales in 1916 and for a year or two before and after were caused by the industrial demands of the World War when other fuels were both expensive and difficult to obtain. Over half of the gas sold in this period was for industrial fuel purposes.

5. Reference to column (3) shows that the amount of gas produced and purchased in the Pennsylvania fields

has varied widely from year to year. The discoveries that have been made in Pennsylvania over the years have not been as large as those that occasionally occurred in East Ohio's territory hereinafter discussed, but they boosted the Pennsylvania production available to Peoples from a low of 8½ billion in 1911 to a high of 20 billion in 1920, and have maintained an average of about 15 billion for the three years 1936-1938.

6. The effect of declining sales after 1916 plus the additional discoveries in the Pennsylvania fields is shown in column (2). Hope's deliveries to Peoples reached a peak of 26 billion in 1916, declined to 6½ billion in 1919 and have further declined in the last fifteen years to less than 4 bil-



lion. The decline from 1916 to 1919 and for a few years thereafter was in part caused by the inability of Hope and Peoples to supply fully the industrial demands of that period.

7. The decline in Hope's annual sales to Peoples from over 26 billion feet in 1916 to 6½ billion feet in 1919 was a reduction of 19½ billion feet. This decline was made up of 4½ billion feet increase in the quantity of gas taken by Peoples from the Pennsylvania fields and the remaining 15 million feet was a reduction in Peoples' sales as well as those of Hope. Since the World War period Peoples has been able to supply a larger percentage of its total requirements from the Pennsylvania fields than theretofore, with the result that Hope's annual sales to Peoples in recent years have ranged from 3 to 4 billion feet per year.

8. The percentages of Peoples' annual supply purchased from Hope shown in column (5) vary widely from year to year. Beginning with the first full year that Hope was supplying Peoples, viz. 1905, they show a range from 73% furnished in 1912 to 5% furnished in 1925. Taking the 36-year average Hope has supplied Peoples with 38.7% of its total annual requirements, but in the year 1938 sup-

plied less than 19% of its annual requirements. Under present conditions it is anticipated that Peoples will require larger annual deliveries from Hope than for some time in the past unless immediate discoveries are made in the Pennsylvania fields.

9. The graph on page 7 of Co.X.2 shows at a glance the large purchases made by Peoples from Hope between 1906 and 1918, the decline in those purchases since that



year and the increased quantities of gas obtained by Peoples from other sources than Hope between the years 1913 and 1931 and again from 1935 to 1937.

(e) *Annual demands from East Ohio*

1. East Ohio was Hope's first and has always been its largest customer. Both companies were organized in 1898, at which time East Ohio accepted its first franchise for distribution of gas in the City of Akron, Ohio. Other franchises followed soon after and at the present time East Ohio distributes natural gas in Cleveland, Akron, Canton, Massillon, Youngstown and other Ohio municipalities, in all over 60, and has almost 500,000 domestic consumers connected to its lines. In the last three years East Ohio has handled annually an average of about 47 billion feet of gas of which Hope has supplied 70%.

2. Page 8 of Co.X.2 shows the total amount of gas handled by East Ohio during the 40-year period 1899 to 1938 both inclusive, and the source of its supply. Page 9 shows this same information in graph form.

3. Attention is called first to the total amount of gas handled by East Ohio shown in column (4) on page 8. It will be noted that the quantities of gas handled by it each year increased rapidly and continuously from 1899 to a peak in the year 1916 when it handled 64 billion feet. In the next few years its sales dropped until for the past

20 years its sales have fluctuated from a low of 35 billion in 1932 to a high of 50 billion in 1937, the average for this period being over 42 billion feet.

4. In column (5) is shown the per cent of East Ohio's annual demands met by Hope deliveries and in column (6)

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the per cent met by production and purchases in the Ohio fields. From column (5) it will be noted that down to the year 1913 Hope was practically the sole source of supply for East Ohio; that two years later in 1915 Hope supplied only 38% of East Ohio's requirements, the balance coming from the Ohio fields; that in the following year Hope supplied 70% and until about the year 1927 continued to supply about 75% or more at which time the percentage supplied by Hope again began to decline, reaching a low of 51½% in 1932. Since that time it has increased until it is now again approximately 70%.

5. These two low points in East Ohio's demand on Hope in 1915 and again in 1932 illustrate one of the hazards of a producing natural gas company, dependent upon distant and fluctuating markets, such as Hope is. As shown by column (3) East Ohio had no Ohio production or purchases of any consequence until the year 1913. At that time a large field of gas was discovered in Lakewood immediately adjacent to the City of Cleveland. It was developed largely by independent operators drilling on very small plots of ground with the result that the field was quickly developed and was quickly depleted. In 1914, the second year of the Lakewood field, East Ohio took in Ohio nearly 18 billion feet and the next year over 32 billion feet. Although its demands in these years, as shown in column (4), had constantly increased, the result of these large purchases in Ohio was to reduce purchases from Hope from 32 billion feet in 1913 to 20 billion feet in 1915.

6. After the flush production of the Lakewood field had been taken, East Ohio continued to obtain from the

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Ohio fields about 10 billion feet a year down to and including 1926. In 1927 a field known as the Franklin-Jackson field in Summit and Stark Counties was discovered. This field reached its peak in 1932 in which year East Ohio took 17 billion feet from the Ohio fields. Annually from 1929 to and including 1937 it has taken around 15 billion feet from the Ohio fields. In 1938 it took 12½ billion feet in the Ohio fields.

7. The effect of the discovery of this Franklin-Jackson field on Hope's sales to East Ohio is shown in column (2). In 1929 East Ohio called upon Hope for 32 billion feet but in 1932 for only 18 billion feet, a decrease of 14 billion. More significant still, East Ohio's demand declined 12 billion feet between 1929 and 1932, shown in column (4), while its purchase and production of Ohio gas increased 2 billion feet, shown in column (3). In other words, while East Ohio's market declined 12 billion feet in those 4 years it did not place this loss of market proportionately upon the Ohio gas and the Hope gas but increased its takings of Ohio gas and thus threw on Hope not only the entire shrinkage in the market but further curtailed Hope by several additional billions of increased takings from the Ohio fields. This aggravated the natural decline in Hope's business due to depression years.

8. Taking the average of the 40-year period East Ohio has been dependent upon Hope for its supply to the extent of 73.3% and was dependent upon Hope in the year 1938 to the extent of 70.7%.

9. Reference to the graph on page 9 of Co.X.2 shows at a glance the effect of the tremendous production obtained

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from the Lakewood field for a short time following the year 1913. It also shows the more gradual building up of the Ohio supply that followed the discovery of the Franklin-Jackson field in 1927. Actually these two discoveries from

a point of view of total volume are more nearly of equal weight than this graph would indicate. The Lakewood field was exploited wastefully and rapidly as a town lot development. Accordingly it quickly rose to a peak in 1915 and as quickly declined. On the other hand the Franklin-Jackson field was developed principally by East Ohio itself and one or two other large operators. The development was sound and economical with the result that the gas was drawn out steadily over a long period of years without waste.

(f) *Total annual demands on Hope*

1. Page 2 of Co.X.2 is a summary of both the total sales and total gas handled by Hope for the years 1898 to 1938, both inclusive; page 3 shows the same data in graph form. Column (12) of page 2 shows the total sales and the preceding columns the classification of those sales. Columns (13), (14) and (15) show the quantities of gas that the Company produced annually but which was not sold. This consisted of free gas to lessors where leases so provided, gas used by Hope in its own operations for drilling, operating compressor stations, etc. and leakage or unaccounted for gas which has been estimated in column (15) for each of the years. These totals added to the actual sales give the total quantity of gas handled.

2. Referring to the total sales of Hope in column (12) the peak year of 1916 is immediately apparent. It is also



apparent from pages 6 and 8 that Hope did not get its share of the increasing demands of 1914 and 1915. These demands were much larger on East Ohio than those of 1913. Yet Hope's sales in both 1914 and 1915 were materially less than in 1913. As already explained this was principally due to additional discoveries in Ohio. The tremendous decline in Hope sales between 1916 and 1919 stands out sharply.

3. The effect of the world-wide depression that began in 1930 and has continued intermittently since that time is clearly shown in column (12). Hope sales in 1932 and 1933 were a little more than 37 billion, rising from that to nearly 59 billion in 1937 but again declining to 48 billion in 1938.

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**E. Daily Demands Resulting From Hope's Gas Sales Obligations**

1. As heretofore indicated, under its public service and contractual obligations the Hope Company's first duty is to supply the domestic consumers of itself in West Virginia and of East Ohio and Peoples in Ohio and Pennsylvania. It has an open-end commitment as to these consumers and it is therefore important to an understanding of the Company's business and its actual obligations to know the character of the domestic demands upon Hope as distinguished from other types of businesses.

2. The outstanding characteristic of this domestic business is that it fluctuates widely from day to day with the weather and can only be determined to the extent that temperatures and wind velocities can be predicted. While annual industrial demands vary with general business activity, they are comparatively steady, day by day, and predictable in advance for current operating purposes. Principally by reason of the domestic demands the Company's actual sales obligations vary more widely on an hour to hour and day to day basis than on the annual basis heretofore discussed.

3. By way of illustration of this general situation, which is self-evident to natural gas men working in the Appalachian field, the charts on pages 10, 11, and 11A of Co.X.2 have been prepared. Page 10 shows the approximate day by day sales by Hope and East Ohio to the domestic and industrial consumers of these two companies for the year 1936. The combined East Ohio and Hope ap-

proximate daily industrial sales are shown by the light lines at the bottom of the chart and the approximate daily

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sales to domestic consumers by the black lines on the top of the chart. Page 11 shows the same type of statistics for the year 1938 and page 11A for the six months ended January 31, 1940. It might be noted that the East Ohio estimates reflected on these pages are based on inputs into the East Ohio system and a subtraction of estimated daily industrial sales, field sales and gas used in operations from the total inputs to ascertain the approximate daily sales to domestic consumers. This method considerably understates East Ohio's sales to domestic consumers on days of extreme demand. On such days part of the deliveries to consumers are of gas previously packed into the lines at high pressures which pressures fall as greater and greater demands are met.

4. Generally it should be observed that the year 1936 was a year of larger annual sales for both Hope and East Ohio than the year 1938 as will be apparent from columns (12) on page 2 and (4) on page 8 of Co.X.2.

5. From the chart for 1936 on page 10 it will be seen that generally during the first six months of that year the industrial demand on Sunday of each week did not vary greatly from 60 million M.c.f. On Mondays this demand rose to about 70 million. On Tuesday, Wednesday and Thursday, it held between 70 and 80 million. On Friday the demand dropped back to below 70 million, and on Saturday to between 40 and 50 million. The pattern for each week is the same. On only three days during these six months, including the very severe weather of January and February of 1936, did it exceed 80 million feet.

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6. During the last half of the year 1936 the pattern is much the same and the quantities are the same except that somewhat increased industrial activity is indicated by the

fact that on some week days of the last three months of the year the demand rose slightly above 85 million.

7. For the year 1938, shown on page 11 of Co.X.2, the pattern of industrial demand each week is again the same, although the industrial demands throughout that year were lower than in 1936. In the first half of 1938 it was only an occasional day when the demand exceeded 60 million. This situation continued until the fall of that year when the demand increased slightly but reached 80 million on only one day.

8. The domestic demand on the other hand varied widely from month to month and from day to day. As shown on page 10, on February 18, 1936 the domestic demand was around 180 and on February 19 it was 185 million although February 25 it was only 105 million, a drop of 80 million per day in less than a week.

9. If we compare the week beginning February 16, 1936, with the week beginning August 16, 1936, immediately below it on the chart, page 10, it will be observed that the industrial demand was about the same day for day in August that it was in February, beginning at about 55 million on Sunday, rising to 70 on Monday and holding there on Tuesday, Wednesday and Thursday, declining to about 60 million on Friday and to 40 million on Saturday. The domestic demand, however, for August on Sunday, the 16th, was only 30 million compared with 135 for the corresponding Sunday in February. On August 17, it was 55 compared with 140 in February. On the 18th it was be-



tween 55 and 60 compared with 180 million. On the 19th it was 50 million compared with 185. On the 20th it was 55 million compared with about 170. On the 21st it was 45 compared with 170 and on the 22nd it was 55 compared with 165.

10. Taking these corresponding weeks in February and August in their totals, the domestic demand for the

week in August was 350 million and for the corresponding week in February was 1150 million or over three times as great. The totals of these same weekly demands in February and August for the industrial consumers were about the same.

11. As to the temperatures prevailing during the years 1936 to 1938, the months of January and February of 1936 were much colder than January and February of 1938 and it will be noted from a comparison of the charts at pages 10 and 11 that the demand for domestic gas was much greater in these months during 1936 than in similar months during 1938.

12. The most recent severe cold spell experienced by the Company occurred in January 1940 and the chart appearing at page 11A of Co.X.2 shows the estimated daily sales to domestic and industrial consumers by Hope and East Ohio for the six months ending with January 1940. For the last two days of December 1939 and for January 1940 these figures exclude sales by Hope which were formerly made by Reserve Gas Company whose properties Hope acquired on December 30, 1939.

13. Comparing January, 1940 on page 11A with January and February, 1938 on page 11 and January and February, 1936 on page 10, it will be observed that East Ohio's and Hope's total daily sales to domestic and industrial consumers reached greater peaks and with more fre-



quency in January, 1940 than in either the comparatively mild winter of 1937-1938 or the extremely cold winter of 1935-1936. For example on at least six days in January, 1940 the combined domestic and industrial sales exceeded 260 million cubic feet whereas 260 million cubic feet was approached only once in the periods covered by the preceding charts, namely on January 23, 1936 as shown on page 10.

14. Comparing the black bars in these charts, which show the combined domestic sales of the two companies, it will be observed that the demands of domestic consumers were substantially higher in January, 1940 than during the last severe cold spell during January and February, 1936. During 1936 the combined domestic demand never exceeded 200 million cubic feet. On January 19, 1940 it exceeded 225 million cubic feet. Actually, as noted above, both the 1936 and 1940 sales to domestic consumers on peak days were considerably larger than the figures shown on the charts by reason of the fact that the East Ohio domestic estimates are based on input figures and do not take into account gas sold from line pack. Thus on January 18, 1940 East Ohio's system inputs were about 230 million cubic feet, whereas a study of meters measuring gas going into East Ohio's city distribution plants indicated total sales on this day were about 242 million cubic feet.

15. The chart on page 11a again illustrates the comparative steadiness of industrial demands as between the winter and the summer months and the extremely fluctuating character of domestic demands which was commented upon above in connection with the 1936 chart on page 10. Also attention might be called to the fluctuations that oc-



cur in domestic demands even during such cold months as January, 1940. On January 13 the combined East Ohio and Hope domestic demand was only 114 million cubic feet, this being on a Saturday. On the following Friday, January 19, the domestic demand exceeded 225 million cubic feet.

16. As later explained, so great were the demands of domestic consumers during the period January 18 to January 21, 1940 that East Ohio had to curtail drastically its sales to industrial consumers, and it was only by such curtailment, the industrial curtailments by Peoples and the curtailment by Hope of Manufacturers that the demands

of domestic consumers were met. The light bars for January 18, 19, 20 and 21, 1940 on page 11A show the effect on industrial sales of this curtailment.

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**F. Method of Operating Hope's Properties**

1. The Hope Company's properties have been developed and are operated to meet its gas sales obligations as heretofore described. As will be apparent, its operating problems and the extent of the gas supply which it must have available are dependent not only upon its annual delivery obligations but upon the varying daily and hourly demands which it must meet.

2. As heretofore stated, the demands which Hope is obligated to supply come generally from two classes of consumers, domestic and industrial. Industrial demand does not vary with the weather but with industrial conditions. Thus in years of great industrial activity such as 1916, 1929 and 1937 it is relatively high and conversely in periods of industrial depression such as 1921 and 1932 it is low, but at all times it is fairly uniform throughout the seasons and from week to week.

3. The domestic load on the other hand depends on the weather. As noted above, through June, July and August of each year it is a fairly steady load for cooking, hot water heating and refrigeration that does not vary widely from day to day, but during the balance of the 12 months, and particularly in the wintertime, it increases or diminishes rapidly. Freezing temperatures and a high wind off Lake Erie cause instant demand from East Ohio's domestic consumers for all the gas that Hope lines can carry. So with falling temperatures and winds in Western Pennsylvania. A few days later the wind dies down, more moderate temperatures prevail and the demand on Hope goes off accordingly.

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4. Hope may thus be called upon to handle on a peak day more than 325 million cubic feet and a few days later be handling only two-thirds of that amount and in the summer following less than one-fourth that amount.

5. These demands that may rapidly increase and as rapidly diminish must be met by turning on and turning off wells in the producing fields. In order that Hope's methods of keeping itself informed as to these varying demands and of operating its properties to meet them may be understood some discussion of its operating methods are necessary.

6. Hope's main office is in Clarksburg, West Virginia. From this office all field operations are directed. Located there are gas dispatchers on duty 24 hours of each day throughout the year. Their duties are extensive.

7. Hope has its own telegraph and telephone system and the dispatchers are in touch at all hours of the day and night not only with every part of Hope's system but with many points of consumption on the Peoples and East Ohio systems.

8. It is the gas dispatcher's responsibility to order wells owned by Hope turned on and off as the fluctuating load on the Company's system demands. When there is needed more gas at points of delivery the dispatcher likewise orders on additional engines in the various compressor stations so as to increase the amount of gas flowing through the system.

9. As an illustration and referring to the map, Co.X.1 and 1A, if the gas dispatcher at Clarksburg finds that he needs additional gas coming into Hastings Station he may order more compressors started in Smithburg, Schutte

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and Jones Station to increase the flow of gas to Hastings. At the same time he will have to start more engines at Hastings to get the gas away to Cleveland. When he orders

compressors on at Jones, for instance, ordinarily he would also order more wells turned into the lines in the vicinity of Jones in order to supply the Jones Station engines with sufficient gas to pump. The same is true of the 47 stations in the Hope system which are handled the same way.

10. On a hard pull the dispatcher has practically all the engines and all the compressor stations on the Hope system running. Then when the weather moderates the dispatcher has to reverse the whole process, shut down the compressor station engines and take off wells in the field. He will frequently take hundreds of wells off the line in one day due to warm weather coming in the middle of the winter, and a few days later put them all back on. In other words he must meet from hour to hour and day to day the demand coming on the entire system and frequently these changes in demand come with little, if any, advance notice.

11. Hope's producing territory in West Virginia is divided into 15 working districts, each having its own headquarters. During the daytime the gas dispatcher can get in touch with the district office to orders wells on and off. During the night there are at least two or three men in each district who have Company telephones in their homes where the gas dispatcher can get hold of them and these men can get in touch with the well tenders and get their men out. In winter full crews are maintained at compressor stations. Every compressor station on the system that



is operating reports to the gas dispatcher at Clarksburg every hour of the day and night telling how many engines are running and the suction and discharge pressures and the pressures carried on each engine. The dispatcher can thus tell at all times what the pressures are on the entire system and whether his orders to start or stop engines have been carried out.

12. The gas dispatcher also at all times knows the number of wells on the line and where these wells are located. If he orders 100 wells on in a certain district the district headquarters immediately sends out men to turn these wells on and as soon as they are on the line the district reports back to the dispatcher stating the wells that are then feeding on the line. In the same way wells are turned off and reported back to the dispatcher. In consequence he knows at all times how many wells he has feeding into the system.

13. Hope, of course, has not the same control over the wells of its vendors. With the exception of its first contract with Godfrey L. Cabot in 1918 in which uniform daily takings throughout the year were required, its major gas purchase contracts call for certain deliveries in the wintertime and for lesser amounts in summer, usually one-half to one-third as much. These deliveries are in both instances in nearly uniform daily amounts, i.e. a uniform amount during the winter season and a uniform amount during the summer season. On the average about 60% of the Company's purchased gas is taken in the winter and about 40% in the summer. In consequence the dispatcher at Clarksburg knows just about how much purchased gas



on any day is coming into the system and he uses Hope's own production which alone is fully under his control to make up the difference between this purchased gas and the demand.

14. The gas dispatcher also not only gets hourly reports from the compressor stations as above stated but he also receives reports of the pressures at Clarington and Round Bottom on the Ohio River, at Price Farm and Gross Farm along East Ohio's system and at Dunham and Richardson Stations at Cleveland. He also gets the pressures at Gross Farm for East Ohio's lines running east to Youngstown. Hourly reports as to temperatures at Cleve-

land and Pittsburgh are likewise wired to the dispatcher, as well as the Weather Bureau's daily forecast for these cities, which are transmitted to him as soon as received.

15. When these hourly reports show pressures dropping, for example on the East Ohio system, the dispatcher immediately has Hastings start up more compressors to increase pressures at Clarington and Round Bottom. When he does this he necessarily starts more engines in compressor stations in the field and turns on more wells in order to get more gas to Hastings. He does the same thing with respect to the Peoples system, getting pressure reports not only from Brave Station but also from Pittsburgh. He likewise watches pressure conditions on the Hope system at various points of distribution.

16. The gas dispatcher thus has the responsibility from hour to hour of routing the gas supply to the points which have the greater need for gas. For instance if he finds there is a more severe pull on the East Ohio system



than on the Peoples system, he can switch more gas toward Hastings, or in case East Ohio is not pulling so heavily on the gas supply, he can switch additional gas to the Peoples Company. Also, for example, if Parkersburg is making a hard pull on the gas supply, the gas dispatcher can divert certain compressor stations to the use of the Parkersburg system and, when this Parkersburg demand declines, he can turn these compressing stations around by manipulation of gates so that they will pump to Hastings Station. It also is the gas dispatcher's duty, in cases of apparent shortages of gas, to carry out the decisions of the operating officials as to ordering factories turned off and curtailing deliveries to the purchasers who are subordinate to the primary rights of the Hope, East Ohio and Peoples domestic consumers.

17. The Charts, pages 12 to 16 of Co.X.2, indicate the approximate daily gas requirements upon the Hope system

(exclusive of free gas to lessors) supplied respectively by produced and purchased gas for the period July 1935 to the end of January 1940, both inclusive. Each block of seven vertical lines is a week beginning with Sunday. The light lines toward the bottom of the chart show the amount of purchased gas each day and the solid black lines the amount of gas produced by Hope from its own wells.

18. It will be noticed at once from the upper half of the chart on page 12 for the period July 1935 through June 1936, that the amount of purchased gas was fairly uniform at about 70 to 80 million feet of gas per day until the end of October at which time it increased to about 120 million feet per day. During the great pull on Hope's system in late January and in February it increased to around



140 million and remained at about 130 million in March and April. May 1st the reduced summer takings began.

19. This change between the winter takings of purchased gas and the summer takings is characteristic of practically all Hope's major contracts which provide for smaller takings in summer than in winter. Generally in May, June or July Hope tries to get the scheduled summer deliveries out of the way as rapidly as possible in order to cut down during August when it will be noted deliveries dropped below 80 million per day. In the latter part of September and in October Hope attempts to make up any deficiency existing in summer deliveries. On November 1st winter deliveries are again resumed.

20. This system of having fairly regular deliveries each day from vendors requires the Hope production system to meet all of the fluctuations up and down of the total demands above this purchased gas and makes very large fluctuations in the amount of Hope's own gas that is sold from day to day.

21. For example it will be noted from the chart on page 12 that the amount of Hope's own production during

the months of July, August and September, 1935, was sometimes more than 75 million feet in one day and was sometimes practically zero. Also, it varied widely from day to day.

22. About January 23, 1936, for a period of a month Hope was faced with a most serious peak load situation caused by sub-zero temperatures in the Appalachian regions and it is perhaps worthwhile to take time to notice how it met those demands.

23. It will be noted from the chart on page 12 that as late as January 19 the total demand on the Hope system was about 200 million feet per day which was met by about



125 million purchased gas and 75 million produced gas. On January 23 the demand rose to about 290 million feet which was met by about 140 million of purchased gas and 150 million of produced gas. On January 27, and again on January 31, the demand was practically 300 million feet, of which 140 to 150 million was purchased and the balance produced. Then on February 19 the demand rose to 308 million feet, of which 143 million was purchased and 165 million produced. It should be noted that 3 days before, to-wit February 16, the demand was less than 220 million and 4 days later the demand was 200 million. In this period of excessive demand in late January and well through February, 1936, Hope did procure some slight help from its gas purchase contracts, deliveries of purchased gas being slightly increased during that period. But the major fluctuations up and down had to be met by Hope's own wells which were called upon to deliver as high as 165 million feet a day although six days later they were delivering less than 55 million.

24. Hope had to meet an unusual condition on January 22, 1936. At one o'clock in the morning of that day the temperature was 28° above zero in Cleveland with just a

normal winter load on the Hope system. The temperature rose to 32° at 4:00 A. M., held around there until 7:00 A. M. and then dropped 11° in two hours. At about that time Hope received word that a severe storm with lower temperature was headed toward Cleveland. By 6:00 P. M. the temperature had dropped to 4° below zero and at 10:00 P. M. it was 10° below. The same thing happened at Pittsburgh. This storm hit the two communities unexpectedly with only a few hours notice and it was necessary for Hope to call its well tenders late in the afternoon and have them work all night in a blizzard turning on wells.

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25. On page 17 of Co.X.2, is shown day by day the number of Hope's wells, the wells available for use, i.e. not undergoing repair, below line pressure or otherwise unavailable, and the wells in use, i.e. turned into the line, during the winter of 1935-1936. It will be noted from column (7) that on January 21 Hope had 2,438 active wells turned into its lines. In the afternoon of the 22nd it called out its well tenders, had them work all night and on January 23 had 3,296 active wells on the line out of a total of 3,317 wells available for use. It will further be noted from the remaining figures in column (7) and those in column (10) that Hope kept substantially all available wells on the line until February 23 when the cold snap had abated and for the rest of the winter all demands were met by less than 2,500 wells.

26. The demands upon the Hope system shown by the succeeding charts, pages 13, 14, 15 and 16, never at any time exceeded 272 million feet per day until January, 1940, shown by the chart on page 16. As a matter of fact all the winter weather there shown until January, 1940, was moderate and less severe than normal.

27. During January, 1940, the Company was required to meet demands upon its system more severe than even those of January and February, 1936. On January 18,

1940, due to sub-zero temperature accompanied by stiff winds in Cleveland, Pittsburgh and elsewhere, the total demands upon the Company's system, exclusive of its sales obligations under the former Reserve Gas Company contracts, for the one day exceeded 323 million. This was



the greatest demand made on the Company's system since the World War period. This demand was met by 148 million feet of purchased gas and 175 million feet of produced gas from Hope's own wells, exclusive of the former Reserve Gas Company's wells. Even so, in order to meet the demands of domestic consumers, it was necessary for East Ohio and Peoples to curtail industrial users in Ohio and in the Pittsburgh district. Sales by East Ohio to both large and small industrial consumers were severely curtailed from Friday, January 19, to Monday, January 22, 1940, at which time the severe weather had somewhat abated. On January 19 East Ohio's curtailment and shut off orders affected deliveries to about 60 industrial plants. During this same period Hope's deliveries to the Manufacturers Light & Heat Company were curtailed.

28. The chart on page 16 shows this January, 1940 situation graphically and the tabulation of wells on page 22 which covers the entire year of 1939 plus January, 1940, indicates how all available Company wells were turned into the line and kept there continuously during the severe demands of January, 1940 in order to meet the Company's obligations to the extent they could be met. In particular the figures for January, 1940 on the chart at page 16 should be compared with those for July, 1939 appearing immediately above. This comparison illustrates both the tremendous differences as between the summer demands and the cold winter demands which the Company must be prepared to supply, and the manner in which winter peaks must be met from its own producing wells.

29. This method of meeting the Company's obligations which has been described—relying upon purchased gas for

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rather steady deliveries from day to day and calling upon Company produced gas to make up the fluctuations in the total demand both up and down—is one of the operating difficulties and business hazards of the natural gas business. It is not normally possible to make favorable gas purchase contracts in West Virginia unless the buyer agrees to take regular deliveries of gas from the seller. The independent gas producer who has no public utility obligations makes his investments in leases and wells with the idea of recovering as much gas as rapidly as possible. He is not interested in conserving his supply for peak loads or in deferring deliveries. To propose to him a contract that he deliver gas in accordance with the extremely varying daily, monthly and annual requirements of Hope's business would not interest him at any reasonable price.

30. The consequence is that the large purchasers of gas in the West Virginia field are required to make a firm commitment for all the gas produced by the independent producer, with sometimes a maximum daily commitment, and to continue those purchases during the life of the wells. The only recognition of varying demands that the buyers have been able to procure is the variation between the winter and the summer takings.

31. It should also be pointed out that the independent producer operates his own wells. If Hope were dependent upon him to increase production rapidly in times of peak demand there would be no way of insuring his compliance with any such obligation. To turn on wells for a few days of peak demand is costly and requires the maintenance of

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a separate organization for this purpose. An independent operator has no incentive for incurring these additional costs or for selling in such an irregular market.

32. It has therefore become customary in the natural gas industry for those companies that have public utility obligations for service to take care of the fluctuations in demand from their own producing fields. This enables them not only to meet peak demands promptly but to buy gas from an independent operator at a lower price than they otherwise would be required to pay.

33. At present Hope must hold itself in readiness at all times to meet a peak demand of 325 million feet or over, exclusive of the former Reserve Gas Company sales. From its contract vendors it can count on about 165 million feet. The balance of 160 million or more must come from its own wells. This means on winter days when the demand is for 200 million, Hope can sell only 35 million of its own gas and must hold in reserve 125 million feet for days of larger demand.

* * * * *

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* * * * *

Signed at Clarksburg, West Virginia, this March 19, 1940.

Loring L. Tonkin.

## 6. COMPANY WITNESS RHODES' EXHIBIT NO. 16-A ENTITLED: "Reproduction Cost New of Company Properties as of December 31, 1938—Written Statement of George I. Rhodes and Summary"

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## STATEMENT OF EXPERIENCE AND QUALIFICATIONS OF GEORGE I. RHODES

**1. Name, address and age**

George I. Rhodes, 239 Forest Avenue, Glenn Ridge, Essex County, New Jersey; age 56.

**2. Education and professional societies**

Massachusetts Institute of Technology (B. S., 1905). Member of American Gas Association, American Society of Civil Engineers, and American Society of Mechanical Engineers and Fellow of American Institute of Electrical Engineers.

**3. Present position**

Vice President and Director of Ford, Bacon & Davis, Inc., an independent firm of engineers that has been engaged since 1894 in the design, the supervision of construction, the construction itself and the operation of industrial properties, natural gas properties and other public utility properties; as well as in valuation work and the preparation of reports relating to cost estimates for proposed construction, for proposed corporate mergers, and for sale and purchase of properties and of reports relating to other general engineering and corporate matters; also Vice President and Director of Ford, Bacon & Davis Construction Corporation, a wholly owned subsidiary, engaged directly in the construction of such properties.

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The firm in addition to design and construction work has made valuations of more than $8,000,000,000 in properties in the last twenty years of which more than $1,250,000,000 have been gas properties. Among its important clients other than utilities and affiliates of Hope Natural Gas Company have been:

American Locomotive Company
American Radiator Company
American Rolling Mills Company
American Smelting & Refining Company
Armstrong Cork Company
Atlantic Refining Company

Borden Company
Botany Consolidated Mills, Inc.
Cities Service Oil Company
Crane Company
Endicott Johnson Corp.

General American Tank Car Corp.
General Cable Corp.
Ingersoll-Rand Company
B. B. & R. Knight Corp.

National Lead Company
National Refining Company
North American Cement Corp.
Pennsylvania-Dixie Cement Corp.
Phillips Petroleum Company
Plymouth Oil Company
Pure Oil Company

Quaker State Oil Refining Corp.
Remington Arms Company, Inc.
John A. Roebling's Sons Company
Scott Paper Company
Socony-Vacuum Oil Company, Inc.
Solvay Process Company
Susquehanna Silk Mills

Texas Corporation
Tide Water Oil Companies
Union Carbide & Carbon Corp.
United Air Lines Transport Corp.
United States Steel Corp.
Winchester Repeating Arms Company
Worthington Pump & Machinery Corp.

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United States Government:
War Department
War Industrial Board
Alien Property Custodian
Emergency Fleet Corporation
Reconstruction Finance Corporation
(Loaned Chief Engineer for 2 years)

United States District Courts of:
Colorado, Delaware, Illinois,
Louisiana, New Jersey,
Southern District of New York,
Western District of Pennsylvania,
Eastern District of Pennsylvania

State of Louisiana, New Orleans Port Commission
State of New Jersey, State Tax Board
New Jersey Port and Harbor Development Commission
Port of New York Authority
Cook County, Ill. (Chicago), Department of Highways
Suffolk County, New York, water supply department

City of Chicago, water supply department
City of Indianapolis, municipal gas department
City of Los Angeles, municipal power and water departments
City of New York, Tax Commission
City of Philadelphia, Department of Transit
City of Seattle, Department of Lighting

**4. Employment and experience other than in the natural gas business**

(a) Summers while a student at Massachusetts Institute of Technology, surveyor in water works construction and laborer in public utility construction.

(b) 1905-6—Instructor in Electrical Engineering Laboratories of Massachusetts Institute of Technology.

(c) 1906-1911—Motive Power Department of Interborough Rapid Transit Co., New York, N. Y., at time of termination of employment being electrical engineer, having charge of all electrical design and, in addition, the construction and operation of all underground conduit and cable facilities of the motive power department of that company.

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(d) 1911-1917—Consulting engineer in the Boston office of White Weld & Co., investment bankers, examining and reporting upon properties financed or about to be financed, or in respect of which changes in securities deposited under collateral mortgages were required or contemplated; and, in addition, participating in the executive direction of construction, development and operation of certain gas and electric properties controlled by or operated under the direction of one of the partners of that firm.

(e) 1917 to date—With Ford, Bacon & Davis, Inc., having general charge of all preliminary reports and estimates of proposed projects, all design and all construction work carried out by that firm, giving particular attention to power systems, both steam and hydro, to industrial plants and to bridges, in addition to the natural gas work outlined below.

**5. Experience in the natural gas and allied businesses**

In 1923, made an estimate of the gas reserves of the Monroe (Louisiana) Gas Field, as a result of which financing was arranged for the construction by Ford, Bacon & Davis, Inc. of the natural gas burning power station of Louisiana Power & Light Co., consuming more than 30,000,000 cubic feet per day.

Working cooperatively with an associated Vice President, E. O. Hill shared responsibility with him in various degrees in all natural gas development work carried out

under the direction of Ford, Bacon & Davis, Inc. and Ford, Bacon & Davis Construction Corp., included in which are the following:

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Edmonton, Alberta, complete natural gas system, preliminary reconnaissance, design, supervision of construction and operation of completed property.

Monroe to New Orleans pipe line system with *Compressor stations, preliminary reconnaissance, purchase of gas reserves, design, construction and the operation of completed system.

Amarillo to Denver pipe line system with gasoline plant and compressor stations, *preliminary reconnaissance, design, supervision of line construction, actual compressor station and gasoline plant construction and the operation of completed system.

Monroe to Memphis and Jackson, Tennessee pipe line system construction.

Monroe to Eldorado (Arkansas) pipe line system construction.

*Monroe to St. Louis pipe line system *preliminary reconnaissance and *construction of pipe lines.

*Monroe to Atlanta pipe line system with compressor stations, *preliminary reconnaissance, *design, *supervision of line construction and *actual compressor station and *Mississippi River crossing construction, and the operation of completed system.

*Amarillo to Chicago pipe line system, preliminary reconnaissance, designs and costs estimates for one group of its promoters.

*Kansas section of Amarillo to Chicago pipe line *construction.

Illinois section of Amarillo to Chicago pipe line construction.

*El Paso to Douglas, Arizona and Cananea, Mexico pipe line system with compressor stations, *preliminary reconnaissance, *design and *supervision of construction.

*Amarillo to Kansas pipe line system, *design and *cost estimates of possible system contemplated to serve large part of State of Kansas.

*Amarillo to East St. Louis gasoline pipe line system with pumping stations, *design and *inspection of construction.

East Texas oil field to Shreveport oil pipe line construction.

Note: *Had prime responsibility on items marked with an asterisk. Associated Vice President E. G. Hill had prime responsibility on other items.

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Charleston, West Virginia to Kentucky state line, a liquid propane pipe line, design and construction.

Toledo to Detroit gasoline pipe line construction.

Philadelphia to Reading, Pennsylvania gasoline pipe line construction.

Other miscellaneous natural gas, gasoline and oil pipe lines, primarily construction, aggregating several hundred miles in length.

The properties and parts of properties so constructed under the direction of Ford, Bacon & Davis, Inc. cost more than $125,000,000. In the case of certain of the properties included in the above costing more than $60,000,000 the operating organizations were built up and the properties operated by Ford, Bacon & Davis, Inc. for various periods of years.

Since the fall of 1935, have been principally engaged on matters relating to valuation, cost determinations and analyses of operations of natural gas properties.

For ten years or more have given particular attention to pipe line corrosion problems and resulting depreciation. Also made intensive technical, electrical and mathematical studies of corrosion phenomena as related to the life of pipe lines and have cooperated with the United States Bureau of Standards in such matters.

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## WRITTEN STATEMENT OF GEORGE I. RHODES

### 1. Employment By Hope Natural Gas Company

Ford, Bacon & Davis, Inc., was employed to determine the reproduction costs new and less depreciation of the properties of the Company for the purpose of the proceedings before the Federal Power Commission in which this exhibit is presented. It has in recent years made such determinations of cost of properties of the Company in connection with rate cases of The East Ohio Gas Company, an affiliated company, before the Public Utilities Commission of Ohio.

From the beginning of the present work I have been in responsible charge of it. The detail work has necessarily been done by a staff of engineers, accountants and clerks.

The principal engineers and accountants comprising this staff are regular employees of Ford, Bacon and Davis, Inc. Their number exceeded 30 at times of greatest activity when field and office work overlapped. They were assisted by upwards of 40 others engaged for the purpose. Regular employees of the Company have assisted on matters where special familiarity with the records or the property was needed to carry out the work. This staff began work in March, 1939 and has been continuously engaged since in preparing the data and making the estimates described and summarized in this exhibit.

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This exhibit gives the results of this determination of reproduction cost new and the inventory of the properties included in the determination and is divided into nine parts as follows:

PART A: Written Statement and Summary

PART B: Natural Gas Production Plant:
Account Nos. 330-1, 330-4, 330-5, 331-1, 331-2, 331-3 and 332-1

PART C: Natural Gas Production Plant:
Account Nos. 332-2, 333-1, 333-2, 334 and 337

PART D: Transmission Plant:
Account Nos. 351-12, 351-23, 352-2, 352-3, 352-4 and 353

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PART G: Transmission Plant:
Account No. 354-2 (continued)

PART H: Transmission Plant:
Account Nos. 354-2 (concluded), 354-3 and 354-4

PART I: General Plant:
Account Nos. 370, 371, 372, 373, 374, 375, 376, 377, 378 and 379

Reproduction cost new less depreciation is set forth in a separate Company exhibit.

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## 2. The Properties of the Company Covered by This Reproduction Cost Determination

The properties and operations of the Company are fully described in Exhibits Nos. 1, 2, 3 and 4 by Mr. Loring L. Tonkin, President of the Company, and these property descriptions need not be repeated here.

The reproduction cost estimate set forth in this exhibit includes the properties of the Company which comprises its production and transmission plants and jointly used general plant, with the exceptions here noted. It excludes natural gas leaseholds and rights, working capital and going concern value. It excludes the pipe lines, compressor station and related properties used to transport coke oven gas purchased from Domestic Coke Corporation which is used by the Company as boiler fuel in connection with its natural gas operations. It also excludes those properties, includ-

ing distribution and general, used solely for distribution of gas in West Virginia.

The items of property covered by this estimate have been classified by the Company in accordance with the new uniform system of accounts for gas utilities prescribed by the Public Service Commission of West Virginia, effective January 1, 1939. This classification is similar to the uniform system of accounts for natural gas companies adopted by the Federal Power Commission, effective January 1, 1940. In this exhibit such classification by the Company has been adopted and the summary shows the new account numbers. For reference purposes the summary also shows the corresponding old account numbers under the West Virginia uniform system of accounts which became applicable to the Company on January 1, 1923.

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### 3. Inventory of the Properties Covered by This Reproduction Cost Determination

The inventory of the operating units of the Company's properties used in this reproduction cost determination is as of December 31, 1938 and is the inventory prepared for use in connection with the determination of original cost under the new West Virginia classification of accounts.

This inventory is based on the Company's investment ledgers and other records, including those of the accounting department, those of the engineering and geological departments and those of the operating departments, and was coördinated and verified as necessary by field checks, inspections and surveys. In the process of verification use was also made of a detailed inventory of the Company's properties as of June 30, 1931 which was made and agreed upon in the 1931 *East Ohio-Cleveland* rate case before the Public Utilities Commission of Ohio by engineers representing the City of Cleveland, engineers of the Ohio Commission and Ford, Bacon & Davis, Inc., representing The East Ohio Gas Company.

Each operating unit of property was identified as to description and dimensions on the books and records of the Company and where necessary by engineers in the field. The several Company records relating to each such unit of property were compared and adjustments made for errors where found. Where appropriate the former agreed inventory relating to each such unit of property was checked in the field and was adjusted in detail to reflect all additions and removals from June 30, 1931 to December 31, 1938. An extensive field check was made of agreed quantities of work

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entering into the construction of many units of property as shown in the 1931 inventory, as a result of which these quantities were found satisfactory for determining the reproduction cost of the property.

All the Company's major lines had been surveyed as a matter of Company record. The actual lengths of 265 miles of other pipe lines were determined by measurements to verify the Company's records. These new surveys confirmed the substantial accuracy of the Company's records relating to these lines.

Inventories of buried equipment such as valves and fittings in pipe lines and in compressor station yards were made from records and drawings and verified in the field to the extent possible. They could not of course be uncovered for measurement or detailed count. In making such inventories the identifiable groups of valves and fittings in necessary use were listed and details making up such assemblies were used in accord with accepted Company and industry practice.

The inventories so prepared and checked constitute the basis of the original cost determination referred to above and the basis of the reproduction cost determination here presented. The inventories in both cases are identical as to operating units of property.

**4. Basic Procedure Followed in This Reproduction Cost Determination**

This reproduction cost estimate of the Company's properties included in the inventory determined as set forth above is that which would be incurred through its reproduction for a newly-organized independent corporation as a major construction operation on a three year construction program. The estimated cost of raising the funds to pay for such construction has not been included.

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The cost of reproduction is that applicable to the inventory of the Company's property as it existed on December 31, 1938 with labor rates and material prices those prevailing during the winter of 1938-1939 and with labor and equipment performances those of current experience. Since that time the level of these rates and prices has remained substantially the same.

The general methods of construction commonly used in large developments were applied in determining the reproduction cost of the Company's property. The Company would purchase all materials such as pipe, well equipment and compressor station equipment, etc. entering permanently into the construction, except building materials and like details. All such major materials would be delivered to contractors at nearest railroad sidings and the contractors would make the installation. In all building and miscellaneous construction, however, the contractors would furnish materials as well as labor. The installation of field meters and regulators and like detailed work closely associated with placing the property in operation would be carried out by the Company's own forces.

Material and equipment prices used are those quoted by manufacturers or vendors for materials and equipment of the specifications and quality used in the actual construction of the property. Prices were requested reflecting actual sales prices at the best discounts for materials and

equipment in the quantity required and reflecting the full purchasing power of an adequately financed construction operation of the size involved. Where equipment was no longer being manufactured as specified the costs of superseding equipment at lowest quoted prices of competent



manufacturers were used as a basis of pricing. Wrought iron pipe was priced as steel pipe. Well casing used as pipe was priced at the price per pound of line pipe, which is lower than that of casing.

Freight rates on material were equalized to average destination of that material so that in the priced inventory like items of equipment in different locations are priced at the same cost.

The labor rates used were the result of an extensive investigation of wages prevailing before and after the end of 1938 in construction work and in industry in and about the territory occupied by the Company's property.

Based on that investigation the labor rates used were chosen as those required to provide the number of men necessary to carry out the construction program, estimated to reach about 13,000 at the peak of construction. The wages of common labor which dominate in the cost of constructing a natural gas property were taken at 45 cents per hour. Appropriately higher wages were taken for semi-skilled and skilled labor, straw bosses, working foreman, foreman, etc., all in accordance with the practices of the construction industry.

Unit costs were developed to reflect the construction conditions prevailing in the territory occupied by the Company's property as determined by an extensive field survey made for the purpose. The use of construction machinery was included wherever economical. These unit costs were developed for a considerable number of types of buildings and of classes of equipment and assemblies which were given identifying numbers. Reference to these types and

classes by number appear in the priced inventory opposite each item to which they were applied.

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In the priced inventory there are no allowances for contingencies and omissions other than those included in the unit costs. The unit costs of specified items of machinery and equipment are the costs as quoted by manufacturers plus freight to average points of delivery and an allowance for miscellaneous material costs described below. The other unit costs involving labor alone or labor and material were developed from basic operations by the use of methods described below in appropriate sections covering each of the several major classes of property. The typewriting of unit cost developments has been omitted in the interest of brevity but such developments are available for examination in convenient form in the working papers.

In the unit cost developments the cost of insurance related to payrolls is included as labor cost at rates quoted by insurance agencies effective as of the inventory date. There are similarly included as labor cost, federal and state unemployment insurance taxes and federal old age benefits tax.

Included in the development of the unit costs are allowances for miscellaneous material costs and miscellaneous labor costs to reflect those costs necessarily incurred and contingencies met in the actual construction work over and above the cost of the specified items of material and hours of labor. As related to materials these miscellaneous costs arise from causes such as purchasing, expediting shipment and checking receipt of materials, and ware house activities as required, together with loss, damage and wastage of materials and other contingencies. As related to labor these miscellaneous costs arise from causes such as bad weather and other contingencies affecting performance, the

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use and wastage of tools, the use of equipment, and the field office and supervisory costs. Contractors' allowances where made cover the contractor's West Virginia gross income tax, general overheads, insurance against abnormal risks and a margin of profit.

* * * * *

[Detailed explanation of determination of unit costs for various types of properties omitted.]

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**11. Undistributed Construction Costs**

In addition to the costs incurred by the construction forces there are other costs relating to the project as a whole rather than to its separate parts which are as necessary as the payments for material installed and the wages of laborers.

These general or undistributed construction costs arise principally from (a) the engineering work necessary to design, supervise and inspect construction, and to test, check and turn over to the management an operative plant, (b) preliminary investigations and reports on the project, nego-

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tiations with the public authorities and others with respect to permits, taxes, and other matters, expenses in connection with the receipt and disbursements of funds and accounting therefor, payment of insurance and taxes applicable to the construction period, the assembling of an operating organization and many other costs, and (c) interest on the money expended for construction of the various parts of the project until they can be put into operation.

These general costs may also include the cost of assembling the funds required for construction, but no provision for such costs is included in the reproduction cost now set forth in this exhibit.

In the 1931 *East Ohio-Cleveland* rate case before the Public Utilities Commission of Ohio these undistributed

construction costs were the subject of conferences between engineers representing the City of Cleveland, engineers of the Ohio Commission and engineers of Ford, Bacon & Davis, Inc., representing The East Ohio Gas Company. These engineers finally agreed upon the following to be added to the reproduction cost new of the priced inventory of the property of the Hope Natural Gas Company:

| | |
|---|---|
| Preliminary organization expense | 0.5% |
| Engineering and superintendence during construction | 4.5 |
| Administrative and legal expense during construction | 2.0 |
| Taxes during construction | 2.0 |
| Interest during construction | 8.0 |

The last item, of course, was to be applied to the total of the priced inventory and the other undistributed construction costs above stated. In the aggregate the allowance thus amounts to 17.72%.

A similar agreement was later entered into in the 1932 *East Ohio-Akron* rate case before the Ohio Commission.

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That Commission itself used the undistributed construction costs for the Hope Natural Gas Company's property above set forth in the 1932 *East Ohio-Akron* case and the 1937 *East Ohio-Cleveland* case.

In view of the repeated use of the above allowance by engineers representing the various parties to rate controversies involving this same property and by the Ohio Commission in its findings relating thereto, the same allowances have been used here. While my own experience and the experience of Ford, Bacon & Davis, Inc. in construction work of this kind indicates that these allowances on the whole understate the full amount of undistributed construction costs that would be actually incurred upon a reproduction of this property, nevertheless I have adopted them in the aggregate as the minimum over-all allowances that are required.

**12. Cost of Developing the Property as a Going Concern.**

All of the elements of cost described above relate solely to the construction of the bare bones of the physical property or plant of the Company. They include no amounts whatsoever for the costs involved in the negotiation of gas purchase and sales contracts or for the costs of seasoning of the property and the development of an efficient operating organization. Neither do they include any of the other additional costs which arise during the period required to develop the full use of the property. In the development of a new property as a major operation all of such costs are experienced and funds must be provided from some source to meet these expenditures. Nevertheless the cost of reproducing the property of the Company set forth in this exhibit contains no allowance for the cost of establishing the property of the Company as a going concern over and above the bare cost of its construction or any other of the allowances commonly referred to as going concern value.

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**13. Summaries.**

The estimated cost of reproduction new as of December 31, 1938 of the production and transmission properties of the Company, together with its general properties used jointly in the production, transmission and distribution of gas, all as described above, are set forth in detail in the priced inventories which constitute Parts B to I of this exhibit. These costs are summarized by accounts in the statement on the following pages of this Part A which shows:

## Hope Natural Gas Company
## Estimated Cost of Reproduction New as of December 31, 1938

| | |
|---|---|
| *Natural Gas Production Plant* (exclusive of leaseholds and properties used to transport coke-oven gas) | $50,167,205 |
| *Transmission Plant* (exclusive of properties used to transport coke-oven gas) | 29,131,101 |
| *General Plant (Jointly Used)* (exclusive of properties used to transport coke oven gas) | 1,379,451 |
| *Total of Above* | $80,677,757 |
| *Undistributed Construction Costs* | 14,296,099 |
| *Total Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used)* (exclusive of leaseholds, properties used to transport coke oven gas, working capital and going concern costs or value) | $94,973,856 |

Signed at Clarksburg, West Virginia, this May 6, 1940.

Geo. I. Rhodes.

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## HOPE NATURAL GAS COMPANY

### Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used) Estimated Cost of Reproduction New as of December 31, 1938

### (Exclusive of Leaseholds, Properties Used to Transport Coke Oven Gas, Working Capital and Going Concern Costs or Value)

### SUMMARY BY ACCOUNTS

| Account Nos. Old | Account Nos. New W. Va. P. S. C. | Description | Total Cost |
|---|---|---|---|
| **Natural Gas Production Plant** (exclusive of leaseholds and properties used to transport coke oven gas) | | | |
| 204 | 330-1 | Natural Gas Producing Lands | $ 2,275 |
| 206 | 330-4 | Rights of Way | 772,814 |
| 204 | 330-5 | Other Land and Land Rights | 21,045 |
| 210 | 331-1 | Gas Well Structures | 11,912 |
| 209 | 331-2 | Field Measuring and Regulating Station Structures | 58,222 |
| 210 | 331-3 | Other Production System Structures | 374,267 |
| 211 | 332-1 | Producing Gas Wells—Well Construction | 19,321,139 |
| 212 | 332-2 | Producing Gas Wells—Well Equipment | 10,874,199 |
| 213, 214 | 333-1 | Field Lines | 17,282,312 |
| 215, 217 | 333-2 | Field Measuring and Regulating Station Equipment | 307,222 |
| 216 | 334 | Drilling and Cleaning Equipment | 1,028,888 |
| 249, 251, 256, 257 | 337 | Other Production Equipment | 112,910 |
| | | **Total Natural Gas Production Plant** (exclusive of leaseholds and properties used to transport coke oven gas) | **$50,167,205** |
| **Transmission Plant** (exclusive of properties used to transport coke oven gas) | | | |
| 218 | 351-12 | Land | $ 155,842 |
| 220 | 351-23 | Rights of Way | 554,352 |
| 221, 223 | 352-2 | Compressor Station Structures | 1,957,473 |
| 222 | 352-3 | Transmission System Measuring and Regulating Station Structures | 14,842 |
| 223 | 352-4 | Other Transmission System Structures | 12,507 |
| 226 | 353 | Mains | 16,500,288 |
| 224 | 354-2 | Compressor Station Equipment | 9,874,271 |
| 225 | 354-3 | Transmission System Measuring and Regulating Equipment | 30,731 |
| 249, 251, 256, 257 | 354-4 | Other Transmission System Equipment | 30,795 |
| | | **Total Transmission Plant** (exclusive of properties used to transport coke oven gas) | **$29,131,101** |
| **General Plant (Jointly Used)** (exclusive of properties used to transport coke oven gas) | | | |
| 244, 245 | 370 | Land and Land Rights | $ 75,018 |
| 247, 248 | 371 | Structures and Improvements | 297,298 |
| 249 | 372 | Office Furniture and Equipment | 210,047 |
| 252, 253, 256 | 373 | Transportation Equipment | 166,990 |
| 251 | 374 | Stores Equipment | 10,304 |
| 251, 256, 257 | 375 | Shop Equipment | 180,110 |
| 224, 257 | 376 | Laboratory Equipment | 3,971 |
| 257 | 377 | Tools and Work Equipment | 5,365 |
| 255 | 378 | Communication Equipment | 419,860 |
| 249, 257 | 379 | Miscellaneous Equipment | 1,488 |
| | | **Total General Plant (Jointly Used)** (exclusive of properties used to transport coke oven gas) | **$ 1,379,451** |
| **Total of Above** | | | **$80,677,757** |
| **Undistributed Construction Costs** | | | **14,296,099** |
| **Total Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used)** (exclusive of leaseholds, properties used to transport coke oven gas, working capital and going concern costs or value) | | | **$94,973,856** |

**7. COMPANY WITNESS ANTONELLI'S EXHIBIT NO. 20 ENTITLED: "Original Cost and Original Cost Trended to 1938 Prices of the Company's Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used) Existing at December 31, 1938—Written Statement of Peter Antonelli"**

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## STATEMENT OF EXPERIENCE AND QUALIFICATIONS OF PETER ANTONELLI

**1. Name, address and age**

Peter Antonelli, 592 Bard Avenue, Staten Island, New York; age 47.

**2. Education**

Crane Technical College, Chicago, Illinois; Cornell University, Ithaca, New York (M.E., 1919).

**3. Present position**

Member of the staff of Ford, Bacon & Davis, Inc., 39 Broadway, New York, New York.

**4. Experience and qualifications**

Upon graduating from Cornell University, I became employed by Ford, Bacon & Davis, Inc. and have been so continuously from that time. My work for this firm has been of an engineering and investigating nature, involving the examination of all kinds of operating properties such as power and light, steam, water, oil and manufactured and natural gas. I have specialized in natural gas work of all kinds and have done a great deal of valuation work. This valuation work has involved the preparation of field inventories, inspection of properties for determination of their condition, development of unit costs, conducting research into labor performances on various construction enterprises, especially pipe lines, investigating basic material prices, analysis of direct material and labor overheads and general overheads and analyses and determinations of

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the original cost of properties. I have assisted in making preliminary investigations into the possibilities of pipe line construction, made preliminary estimates and the like.

The companies for which I have done work of the foregoing nature include the following:

Amarillo Gas Company
Arkansas Natural Gas Company
Arkansas Pipe Line Corporation
Atlantic Refining Company
Carpenter Steel Company
Central Hudson Gas Company
Coffeyville Gas & Fuel Company
Columbia Gas & Electric Corporation
Commonwealth & Southern Corporation
Consolidated Gas Company
Corning Light & Power Company

Dalhart Gas Company
Dayton Power & Light Company
Dominion Tar & Chemical Company
Duquesne Light Company
East Ohio Gas Company
Empire District Electric Company
Fredonia Gas Company
Hardin Wyandot Lighting Company
Hope Natural Gas Company
Kansas City Gas Company

Logan Gas Company
New York Steam Corporation
Niagara Lockport & Ontario Power Company
Ohio Producing Company
Oklahoma Natural Gas Company
Ouachita Natural Gas Company
Paducah Water Company
Pennsylvania Electric Company
The Peoples Natural Gas Company
Potter Gas Company
Puget Sound Power & Light Company

Sinclair Consolidated Oil Company
Southern Natural Gas Company
Standard Oil Company of Indiana
Standard Plate Glass Company
Tri-State Gas Company

United Fuel Gas Company
Union Carbon & Carbide Company
Western Ohio Public Service Company
Winchester Repeating Arms Company

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## WRITTEN STATEMENT OF PETER ANTONELLI

### 1. Matters Covered By This Exhibit

This exhibit sets forth the original cost of the production system, the transmission system and general properties of Hope Natural Gas Company as these properties existed at December 31, 1938, excluding those properties, both distribution and general, used solely for the distribution of gas in West Virginia. It explains the methods followed in determining this original cost. This exhibit also shows the original cost of these properties trended to 1938 prices, namely the original cost adjusted to the labor rates and material prices prevailing in 1938, and explains the methods used in determining this trended original cost.

On January 1, 1939 there became effective and applicable to the Company a new Uniform System of Accounts for Gas Utilities prescribed by the Public Service Commission of West Virginia, Exhibit No. 13 in the present proceedings. Under this new uniform system the Company was required to state its plant accounts on the basis of the original cost of the properties included therein.

In anticipation of the adoption by the West Virginia Commission of this new system of accounts, the Company in July, 1938 began the studies and investigations of its records necessary to determine accurately the original cost of its properties. It hired a special force ranging up to 40 individuals during the balance of 1938 and up to 120 in 1939 and 180 in 1940. This force, consisting of accountants, engineers, clerks, comptometer operators and others, has

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been continuously engaged during all of this period in making the studies and original cost determinations sum

marized in this exhibit and has been under my personal direction and supervision since September, 1938.

The Company's accounting methods have varied from time to time during the long period of its existence. From its organization in 1898 to December 31, 1922 there was no system of accounts prescribed for the Company and it kept such books and records as it deemed necessary. During this period the Company followed various accounting methods, as accounting principles were not as fully developed as they are at present. Since the Company's natural gas business was an outgrowth of the oil business and was organized by persons connected with the oil business, it generally followed accounting methods then in use by oil companies. For example, in accordance with conservative oil company accounting methods the Company did not capitalize well construction costs.

Effective January 1, 1923 the Public Service Commission of West Virginia prescribed a uniform classification of accounts to be kept by all natural gas companies subject to its jurisdiction. This classification caused a number of major changes to be made in the Company's methods of keeping property records. A revised classification of accounts was prescribed by the West Virginia Commission, effective as of January 1, 1931, which was adopted by the Company January 1, 1932 and remained in effect until December 31, 1938. As noted above, effective January 1, 1939 the present new West Virginia system of accounts became applicable. These various uniform systems of accounts for



gas companies as prescribed by the Public Service Commission of West Virginia are in themselves not identical either in principle or in the methods of accounting permitted thereunder.

The cost of the Company's properties as capitalized on its books therefore reflects many different accounting methods and is not in accordance with the accounting principles reflected in the new 1939 West Virginia system of

accounts. However, irrespective of variations in accounting methods, the Company throughout its history by vouchers and otherwise has kept a complete and detailed record of all of its transactions. Since the Company has preserved substantially all original vouchers and all accounting books and records from the beginning of operations it was possible, by checking the vouchers and other available records pertaining to properties in existence at December 31, 1938, to determine accurately the original cost of substantially all of these properties irrespective of changes in accounting methods, and to estimate the original cost accurately of minor portions of the property where original vouchers were not available or where purchases of operating units or systems had been made from other utilities and no records of the original cost of such properties were available.

After the original cost of the Company's properties was determined this cost was adjusted by trends based on labor and material prices as shown in the Company's books to determine what the original cost would have been had the fluctuating labor rates and material prices paid by the Company in the past been the same as those paid in 1938. This adjustment corrects the original cost of the properties in existence at December 31, 1938 to reflect



changes in price levels and indicates what the original cost of these properties would have been had the general price level been constant at the 1938 level throughout the whole period of the construction of the Company's properties since 1898 on.

## 2. Inventory Of The Company's Properties As Of December 31, 1938

The first step in these determinations was to obtain an accurate inventory of the Company's properties as of December 31, 1938. To this end the following steps were taken:

(a) A transcription was made of the Company's investment ledgers detailing the various items of property owned by the Company as of December 31, 1938 as shown by its books. This transcription resulted in a complete book inventory of all of the Company's production system, transmission system and general properties (excluding its properties, both distribution and general, used solely for distribution of gas in West Virginia) except communication equipment, where the investment ledgers were not so detailed as to show the communication equipment in place at December 31, 1938. This book inventory was transcribed upon approximately 40,000 multi-column sheets.

(b) The December 31, 1938 book inventory as so transcribed was then checked, account by account, against all other available records pertaining to these properties in the Company's general office and in its field offices throughout its system. These records consisted of subsidiary property records in the Company's accounting department, records, maps and other data



pertaining to the property accounts in the Company's engineering and geological departments and in the operating departments in the field offices.

(c) This book inventory so prepared and checked against all office records was then further checked in the field. Substantially all of the visible property was verified by field observation as to its existence and description. The buried property such as pipe lines was checked in the field by a sampling method as to its existence and description. Thus the book inventory was corrected to reflect only property in existence at December 31, 1938.

In connection with the field check of compressor station structures and equipment, use was made of a

detailed inventory of the Company's properties as of June 30, 1931 which was made and agreed upon in the 1931 East Ohio-Cleveland rate case before the Public Utilities Commission of Ohio by engineers representing the City of Cleveland, engineers of the Ohio Commission and Ford, Bacon & Davis, Inc., representing The East Ohio Gas Company. This agreed 1931 inventory, adjusted to reflect all additions and retirements from June 30, 1931 to December 31, 1938 as checked in the field, was used to verify the book inventory of compressor stations and structures and to furnish more detailed descriptions and dimensions of property than appeared in the investment ledgers.

In the verification of the inventory of pipe lines new surveys were made wherever necessary to confirm the accuracy of inventory data on hand.

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(d) In the course of the preparation of the inventory it was found that the transcribed investment ledgers did not give a sufficiently detailed description for the property in certain accounts. Accordingly, in the course of the field check previously described, new physical inventories were made in the field as of December 31, 1938 for field and transmission measuring and regulating station equipment, shop equipment, office furniture and equipment, other production equipment, other transmission system equipment, garage equipment, communication equipment, pumping and bailing outfits, laboratory equipment and all structures except those at compressor stations.

The inventories so prepared and verified comprise the properties existing at December 31, 1938 for which the original cost and trended original cost were determined. They likewise constitute the basis of the reproduction cost determination presented in another Company exhibit.

In cases where the preparation and verification of this inventory showed that property no longer in existence was still carried on the books of the Company all necessary adjustments were made to eliminate the charges for such property. Where property was found by the field check which had not been recorded on the books, appropriate adjustments were made to include these items. Various adjustments were made to transfer property between accounts as prescribed by the new West Virginia system of accounts in order to classify the Company's plant accounts in accordance with this new system.

Statement C at pages 33 and 34 of this exhibit shows a classification of the inventory, transfer and correcting ad-



justments made to the amounts capitalized on the Company's books as of December 31, 1938. Columns (6) to (8) of this statement show the changes resulting from the inventory adjustments and transfers between accounts as above described.

### 3. General Procedures Followed In Original Cost Determination

#### A. Property Constructed by the Company

For each unit of property shown in the inventory the Company's records were examined to determine whether such property was constructed by the Company or purchased by the Company from another party. Different methods were necessarily required for determining the original cost of these two types of property. There is first explained here the general procedures used to determine the original cost of properties constructed by the Company itself and next the general procedures as to purchased property.

In transcribing the book inventory as previously explained there was likewise transcribed from the investment ledgers the cost of each item as capitalized on the

Company's books, and the voucher number and date of each voucher. These vouchers were carefully analyzed, and where such analysis disclosed them to be closing vouchers, transfer vouchers or inventory adjustment vouchers, the original vouchers containing the original entries pertaining to the unit of property were traced and analyzed. To trace the original vouchers, use was made of all of the available data in the Company's records including investment ledgers, voucher records, general ledgers, warehouse transfers, labor and teaming vouchers, etc. The actual costs disclosed by the original vouchers were recorded in all cases where the investment ledgers did not correctly set forth these costs.

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In the analysis of the actual cost of items constructed by the Company it was ascertained that particularly prior to 1923 some costs were charged to expense. For example, prior to 1923 all the costs of drilling the Company's wells were charged to expense. Accordingly the voucher analysis referred to above included an analysis of all operating expense vouchers pertaining to construction and improvement costs which had been charged to expense. All actual material and labor costs of property in existence at December 31, 1938 which had previously been charged to expense were recorded on the final original cost sheets.

Statement D at pages 35 and 36 of this exhibit sets forth an analysis and summary of these direct costs not heretofore capitalized by the Company.

The analysis of vouchers and records showed that Company expenditures for field supervision, field clerical work, warehouse handling, and other field costs in connection with equipment and plant construction had in many cases not been included in costs as capitalized by the Company on its books but had been charged to operating expenses. In order to determine the original cost of the Company's properties such field costs, termed "unloading, hauling and

warehouse handling costs" and "indirect field costs," had to be ascertained from an analysis of the Company's records covering the costs experienced in the performance of these construction activities. Unloading, hauling and warehouse handling costs and indirect field costs were ascertained and recorded on the final original cost sheets for the property in the following accounts:

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Acct. 332-1—Producing Gas Wells—Well Construction
Acct. 332-2—Producing Gas Wells—Well Equipment
Acct. 333-1—Field Lines:
Construction
Equipment
Acct. 333-2—Field Measuring and Regulating Station Equipment
Acct. 354-3—Transmission System Measuring and Regulating Equipment

Statement E at pages 37 to 40 of this exhibit explains the methods followed in determining these costs.

The analysis of the vouchers and records also showed that in most cases the Company's expenditures for general administrative supervision, engineering, accounting, purchasing, payroll and other like services in connection with the equipment and the plant construction had not been included in the costs capitalized by the Company but had been charged to operating expenses. To determine the original cost of the Company's properties in accordance with the accounting principles set out in the new West Virginia system of accounts it was therefore necessary to determine the amount of these expenditures incurred in connection with the construction and acquisition of the properties in existence at December 31, 1938. These expenditures, termed "overhead costs," were grouped as follows:

1. Purchasing department, including the traffic and invoice departments.
2. Payroll department.

3. Land department, including the leasing department.
4. General overhead, consisting of administrative, legal, accounting and engineering services.
5. Interest during construction.

A detailed study was made by calendar years from the inception of the Company until the end of 1928 to determine



what portion of the Company's expenditures for these departments and services should be charged to investment so that the original cost of the existing plant might be properly shown.

This study showed the proper percentages for these overheads to be added to the direct material and labor original costs. These percentages were accordingly applied on the final original cost sheets to direct material and labor original costs there shown where such overhead costs had not previously been included in the capital accounts. Interest during construction could not be obtained from an analysis of the Company's overhead expenditures since the Company has never included any charge for interest during construction in its plant accounts or in its operating expenses. Interest during construction was therefore applied at the rate of 6% per annum to construction projects requiring more than thirty days to build and costing more than $5,000.

Statement F at pages 41 to 52 sets forth first a description of the methods used in determining these overhead percentages and second a table summarizing them by years. The amounts of the various kinds of overhead costs and the total of these costs included in the original cost are shown in Statement G at pages 53 and 54 of this exhibit.

In general the original cost sheets covering property constructed by the Company therefore show for each item of property:

1. The cost at which capitalized on the Company's books.

2. Adjustments required by reason of corrections of the book inventory, transfers of property as between accounts and corrections to eliminate inaccuracies where the cost as capitalized on the Company's books was based on transfer or inventory adjustment vouchers.

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3. The costs of the property not capitalized by the Company consisting of:
   (a) Direct labor and material costs,
   (b) Unloading, hauling and warehouse handling costs,
   (c) Indirect field costs,
   (d) Overhead costs.
4. The total original cost of each inventoried item of property in existence at December 31, 1938.

**B. Property Purchased by the Company**

(1) *Purchased from non-utilities, or from other utilities where not an operating unit or system*

Where the analysis of the Company's records showed units of property in existence at December 31, 1938 which had been purchased from non-utility corporations or individuals, or from a public utility in cases where the item was not an operating unit or system, the original cost was recorded on the original cost sheets at the cost of acquisition to the Company, plus general overhead to cover administrative, legal, accounting and engineering services in connection with these purchases in the amount of one-fourth of the general overhead percentage determined for properties constructed by the Company. As in the case of properties constructed by the Company all pertinent vouchers and other records were carefully analyzed in order to record correctly the cost of acquisition on the original cost sheets.

(2) *Purchased from other utilities as an operating unit or system*

Where the analysis of the Company's records disclosed that property in existence at December 31, 1938 had been purchased as an operating unit or system from a public utility, the original cost of such property was determined

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by an analysis of all the pertinent records and data that could be obtained. The amount of such property is small, comprising less than 7% of the total.

Certain of these public utilities such as Flaggy Meadow Gas Company, Mountain State Gas Company, Clarksburg Light and Heat Company and Reserve Gas Company were either affiliated with the Company or were purchased in their entirety. All of the existing books and records of these companies were available for examination and analysis. In such cases these records were analyzed and the original cost determined precisely as was done in the case of the Company's books and records for property constructed by the Company. As to other utility corporations such as Fayette County Gas Company and United Fuel Gas Company, the original cost of the properties in question was furnished by these companies at the request of the Hope Company. This data was fairly complete, but did not include overheads. All other companies from which original cost data was requested advised that they were unable to furnish the original cost of the properties purchased from them by the Hope Company. In such cases, involving minor amounts of property, the original cost was based on the Hope Company's experience in constructing similar properties under similar circumstances and during like periods.

Inasmuch as none of the original cost data obtained by inquiry from other utility corporations included overhead expenditures, the overhead percentages developed from the analysis of the Company's experience as described

above were applied. The studies made indicated that such an application resulted in a conservative estimate of the overhead expenditures actually incurred in the construction of these purchased properties.

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The original cost sheets listing purchased property contain references to vouchers of the predecessor company where available or to other sources of information used in the original cost determinations. The last column on each of these sheets shows the total original cost of all purchased properties determined on the basis here described.

**4. Application Of General Original Cost Procedures To Major Classifications of Property**

The general original cost procedures heretofore described were applied, account by account, to the properties in each plant account. This application may be briefly described by major classifications of property as follows:

*Land.* The original cost of each parcel of land was based on the deeds and original vouchers pertaining thereto. This cost includes the consideration paid, the cost of obtaining the deed, recording, abstracting and miscellaneous costs and land department and general overhead expenditures.

*Natural gas leaseholds.* The leasehold accounts include all the natural gas leaseholds, natural gas rights and royalties which the Company owned as of December 31, 1938, both those classified by the Company as operated and those classified as unoperated.

In determining the original cost of these leaseholds and rights the consideration paid by the Hope Company for the first lease taken or acquired by the Hope Company on each tract under lease at December 31, 1938 was ascertained and recorded on the original cost sheets. No distinction was drawn as to whether the lease was taken or ac-

quired from a farmer, individual or private company or another utility. There was likewise included the cost of

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obtaining, recording and abstracting these first leases and gas rights and land department and general overhead expenditures.

The consideration paid by the Company was obtained from vouchers listed in the lease ledgers. The cost of obtaining leases acquired directly from land owners was secured from lease vouchers during the period 1921 to 1938 inclusive. Prior to 1921 such costs were estimated, where necessary, based on an analysis of the known cost of obtaining over 3,700 leases. Costs of recording and abstracting leaseholds were secured in most cases directly from the Company's records. Where estimates were necessary they were based on a summary of recording and abstracting costs contained in vouchers, statements and other records of the Company.

This original cost is the nominal acquisition cost of the particular tracts under lease at December 31, 1938 and does not reflect the substantial original exploration costs by way of delay rentals, dry hole expense and losses on cancelled leases incurred by the Company in exploring for, locating and developing these tracts.

*Rights of way.* The original cost of rights of way includes the consideration and advance damages paid, expenses incurred in obtaining and fees paid for recording and land department and general overhead expenditures. The original cost was obtained by an analysis of vouchers, original grants, inventory ledgers, and rights of way record books. In determining these costs the right of way over each farm or land tract was considered as a unit of property. Inventory adjustments were made on this basis where rights of way were not retired by the Company when a line was lifted.

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*Gas Wells.* The original cost of gas well equipment was generally determined from the Company's well investment ledgers. Since its inception the Company has recorded by individually numbered wells a description of the equipment in each well, also the size, quantity and cost, together with the voucher numbers and dates. Vouchers were checked wherever necessary. Warehousing, purchasing and general overhead expenditures and interest during construction where applicable were included.

Prior to 1923 well construction costs were not capitalized by the Company but were charged to expense. Accordingly well construction costs prior to 1923 were determined from an analysis of the original vouchers and well records. Beginning in 1923 well construction costs were generally capitalized and recorded in the well investment ledgers. These ledgers were used in determining the original cost of well construction from January 1, 1923 on, checked as necessary against vouchers. Indirect field costs, payroll, purchasing and general overhead expenditures and interest during construction where applicable were included in well construction.

The original cost of wells drilled by the Company or for the Company by a contractor when the Company furnished the rig reflects the average cost of drilling rigs, after elimination of recorded arbitrary charges for use of derricks, bull wheels, sand reels, etc.

*Pipe lines.* For lines built or acquired subsequent to 1919 the investment ledgers in most cases reflected the actual direct material and construction costs. All ledger entries of any appreciable amount for such lines were

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checked against the original vouchers for accuracy. Prior to 1920 the Company's investment ledgers did not segregate the cost of pipe lines by individual lines. The original cost of lines laid prior to 1920 and still in existence at De-

cember 31; 1938 was therefore determined from the original vouchers, the 1920 inventory voucher allocating total pipe line costs to individual lines being disregarded in this connection as not truly reflecting correct original cost. Original vouchers were found for all lines except for a few small field lines laid prior to 1907 where the original cost had to be estimated. These estimates were based on the known costs of lines laid by the Company at approximately the same period and in the same territory.

The original cost of pipe lines includes direct labor costs not included in the cost capitalized on the Company's books, indirect field and warehousing costs and overhead expenditures as described above, except that in the case of main and trunk lines indirect field costs and warehousing costs were not included. In the case of main and trunk lines indirect field costs were generally included among the direct construction costs as shown by the vouchers, and as a general rule warehousing costs were not incurred in the construction of these lines as the material was unloaded at the point of construction.

*Compressor station structures and equipment.* The original cost of the equipment in the Company's compressor stations was obtained from the investment ledgers, verified and corrected on the basis of the vouchers and invoices. These ledgers did not segregate the installation costs of



equipment erected prior to 1920 from the construction costs of the compressor station structures. It was likewise found that prior to 1920 no attempt was made to show on the Company's books the cost of individual compressor station buildings, nor was any record made of the number and size of the principal compressor station buildings erected during any construction period. Charges were shown for each compressor station as a whole. After 1920 the costs of the principal buildings at each compressor station were set up separately but in many instances materials were not

accurately charged and the costs of smaller buildings and miscellaneous items such as concrete walks, curbs, equipment foundations, etc. were absorbed in the major structures.

In view of these circumstances a special study was made of all vouchers, records and other available data pertaining to compressor station structures and equipment. In this analysis all major investment ledger entries were verified by an examination of the vouchers. The materials as enumerated in the purchase vouchers were summarized and the total quantities purchased were compared with the total materials reasonably necessary for the construction of the buildings at each station as shown in the agreed 1931 inventory (adjusted to date) previously referred to. In many instances local conditions which might affect the quantity of materials required were checked in the field by conferring with men who were in charge, or who worked on the various jobs. Upon completion of this study, the actual cost of the various materials such as sand, gravel, cement, lumber, etc. was prorated over the buildings comprising each compressor station, using as a basis the quantities contained in the agreed inventory. The costs of



labor, teaming, freight and engineering and supervision were then allocated to the buildings in like manner, subject to the necessary variations which local conditions or engineering judgment might require. The various material and labor costs thus derived were then summarized for each structure in the inventory. This summary also gives the date of construction of each structure, and information as to whether the work was performed by Company forces or by a contractor.

This analysis showed that a number of the structures existing at December 31, 1938 were not included in the Company's capital accounts. Where the cost of these structures was shown in the expense vouchers it was recorded on

the original cost sheets. In a few cases in the absence of actual cost records, the original cost of structures was estimated on the basis of material prices and labor rates for the years involved as paid by the Company and obtained from a study of compressor station voucher records and payroll accounts from 1903 to 1938.

Included in the original cost of compressor station structures and equipment are direct material and labor costs not capitalized on the Company's books, purchasing, payroll and general overhead expenditures and interest during construction where applicable.

*Other structures.* For structures other than compressor station structures as included in the various structure accounts the Company's investment ledgers and vouchers were analyzed and all determinable actual costs were recorded on the original cost sheets. A special analysis was made to determine whether the material and labor costs as so found were consistent with the materials necessary for the structures as determinable from the new field inventories of these structures. In a few cases where partial



or complete costs of a structure had not been capitalized and could not be identified in expense vouchers, the omitted costs were estimated, based on known costs of similar structures, and these estimated costs were recorded on the original cost sheets as costs which had been charged to expense. In other respects the original costs of these various structures were completed in the same way as the original costs of the compressor station structures.

*Miscellaneous and general equipment.* The new field inventories made in connection with the original cost inventory as previously described included new inventories for the items contained in the miscellaneous and general equipment accounts. The vouchers for the major portion of the equipment listed in these new inventories were ex-

amined and the costs as set forth in these vouchers were recorded on the original cost sheets. This equipment included measuring and regulating equipment, shop equipment, office furniture and equipment, other production and other transmission system equipment, garage equipment, communication equipment, pumping and bailing outfits and laboratory equipment. For the items that could not be identified by voucher the Company's purchasing department records and vouchers showing the cost of similar items were used and in a few cases for certain items the original cost was determined by trending known costs.

Installation costs of communication equipment were based upon the costs of installing Company telephone lines and equipment for which the actual installation costs were determinable from the Company's records.

In completing the original cost determination for these accounts purchasing, payroll and general overhead expenditures were included where applicable.

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**5. Details Of The Original Cost Determination**

The details of this original cost determination are recorded on approximately 78,000 multi-column sheets. The final original cost sheets set forth specifically the inventory as of December 31, 1938, the original cost of each inventoried item, whether heretofore capitalized or not capitalized by the Company, and the voucher and other references showing specifically the source of the original cost determination. These detailed sheets are available at the Company's general office for analysis and check by all parties to the present proceeding and have been examined by members of the staff of the Federal Power Commission commencing in January, 1940. In the interest of economy and brevity these 78,000 sheets are not here reproduced.

## 6. General Procedures Followed In Trending The Original Cost To 1938 Prices.

In trending the original cost of the Company's properties existing at December 31, 1938 to reflect the 1938 price level it was necessary to develop numerous basic trends. As to the larger part in value of the Company's properties these trends were based on labor and material prices shown on its books and records.

In certain instances it was necessary to develop trends in part by reference to general price data accumulated by other natural gas companies, by Ford, Bacon & Davis, Inc. and by certain statistical services, but in every such case the data used in arriving at the trends were for the kinds of labor and material entering into the type of construction constituting natural gas properties such as these of the Hope Company.

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The original costs of the land, rights of way and leasehold accounts and a few minor accounts such as laboratory equipment, drilling and cleaning tools and automobiles were not trended. The original costs of properties in all other accounts were trended by the use of yearly trend factors with 1938 costs as 100. These factors for each account were obtained from trends of the particular labor and materials included in the properties in each account. In some instances composite factors were used, determined by trending representative items of property in each account.

The year by year trend factor so determined for each account was applied to the original cost incurred in each year for the property in that account which was still in existence at December 31, 1938. The resulting figures fairly show what would have been the original cost of the Company's present properties if these had been constructed over the years at the 1938 labor and material prices.

Statement H at pages 55 to 62 of this exhibit sets forth a description of the determination of these yearly trend factors. Statement I at pages 63 to 96 shows for each account the original cost of the properties in the account as existing at December 31, 1938, segregated by years first placed in public service, the trend factor for each year and the total original cost trended to 1938 prices. Statement J at pages 97 and 98 summarizes by years and for all of the Company's properties here involved the data shown in Statement I for each account.

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**7. Details Of Trended Original Cost Determination**

The details of the trending of the original cost of the Company's property to reflect 1938 labor rates and material prices are available at the general office of the Company for inspection by all parties to these proceedings. In the interest of economy and brevity they are not reproduced here.

**8. Summaries Of Original Cost And Original Cost Trended To 1938 Prices**

Statement A at pages 29 and 30 of this exhibit shows for each plant account the original cost and the original cost trended to 1938 prices of the natural gas production plant, transmission plant and general plant of the Company existing at December 31, 1938, excluding those properties, both distribution and general, used solely for distribution of gas in West Virginia.

At the end of Statement A there are deducted both the original and trended original costs of the Company's properties in these plant accounts which are used to transport coke oven gas. It will be noted from Statement A that the total original cost of the properties in these plant accounts of the Company, excluding the property used to transport coke oven gas, amounts to $69,735,637.86 and that this original cost trended to 1938 prices totals $105,101,912.

Statement B at pages 31 and 32 of this exhibit classifies the original cost of the Company's property, account by account, as between (1) properties constructed by the Company, purchased from non-utilities or from other utilities where not operating units or systems and (2) properties purchased by the Company from other utilities as

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operating units or systems. It will be observed from Statement B that the original cost of properties constructed by the Company, etc., excluding property used to transport coke oven gas, amounts to $64,917,509.13 and that the original cost of properties purchased by the Company from other utilities as operating units or systems totals $4,818,128.73.

Statement B likewise shows for properties constructed by the Company, etc. the amount heretofore capitalized on the Company's books, the total inventory, transfer and correcting adjustments made in the course of the original cost determination, the amount of direct material and labor costs expensed, the amount of warehousing costs, the amount of indirect field costs and the total overhead expenditures incurred in connection with the construction and acquisition of these properties. As to properties acquired as operating units or systems from other utilities, Statement B shows the cost as heretofore capitalized on the books of the Company, the direct material and labor original cost of these properties and the warehousing, indirect field and overhead costs which have been added to complete the original cost of these properties. It will be noted that the costs heretofore capitalized on the Company's books for these utility properties purchased amount to $3,218,399.28 as against the original cost of these properties of $4,818,128.73.

Signed at Clarksburg, West Virginia, this May 14, 1940.

Peter Antonelli

Statement A

## HOPE NATURAL GAS COMPANY

### Original Cost and Original Cost Trended to 1938 Prices of Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used) Existing at December 31, 1938

| Account Nos. Old | Account Nos. New W. Va. P. S. C. | SUMMARY BY ACCOUNTS Description | Original Cost | Original Cost Trended To 1938 Prices |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| **Natural Gas Production Plant** | | | | |
| 204 | 330-1 | Natural Gas Producing Lands | $ 2,370.39 | $ 2,370* |
| 205 | 330-2 | Natural Gas Producing Leaseholds: | | |
| | | Operated Leaseholds, Gas Rights and Royalties | 1,684,635.98 | 1,684,636* |
| | | Unoperated Leaseholds, Gas Rights and Royalties | 681,882.21 | 681,882* |
| 206 | 330-4 | Rights of Way | 704,021.57 | 704,022* |
| 204 | 330-5 | Other Land and Land Rights | 22,125.56 | 22,126* |
| 209 | 331-2 | Field Measuring and Regulating Station Structures | 40,773.27 | 41,799 |
| 210 | 331-3 | Other Production System Structures | 291,872.40 | 348,145 |
| 211 | 332-1 | Producing Gas Wells—Well Construction (A) | 17,783,637.13 | 34,384,320 |
| 212 | 332-2 | Producing Gas Wells—Well Equipment | 8,168,191.52 | 10,663,983 |
| 213, 214 | 333-1 | Field Lines | 12,356,757.34 | 17,544,243 |
| 215, 217 | 333-2 | Field Measuring and Regulating Station Equipment | 277,529.66 | 295,311 |
| 246 | 334 | Drilling and Cleaning Equipment | 604,936.40 | 601,353** |
| 249, 251, 256, 257 | 337 | Other Production Equipment | 89,102.37 | 105,335 |
| | | **Total Natural Gas Production Plant** | **$42,707,835.80** | **$ 67,079,525** |
| **Transmission Plant** | | | | |
| 218 | 351-12 | Land | $ 168,575.67 | $ 168,576* |
| 220 | 351-23 | Rights of Way | 453,168.53 | 453,169* |
| 221, 223 | 352-2 | Compressor Station Structures | 1,811,605.37 | 2,498,445 |
| 222 | 352-3 | Transmission System Measuring and Regulating Station Structures | 13,950.88 | 20,896 |
| 223 | 352-4 | Other Transmission System Structures | 11,508.57 | 12,865 |
| 226 | 353 | Mains | 15,491,559.19 | 23,044,740 |
| 224 | 354-2 | Compressor Station Equipment | 8,644,011.79 | 11,536,567 |
| 225 | 354-3 | Transmission System Measuring and Regulating Equipment | 26,713.48 | 41,021 |
| 249, 251, 256, 257 | 354-4 | Other Transmission System Equipment | 23,041.90 | 26,049 |
| | | **Total Transmission Plant** | **$26,644,135.38** | **$ 37,802,328** |
| **General Plant (Jointly Used)** | | | | |
| 244, 245 | 370 | Land and Land Rights | $ 98,187.72 | $ 98,188* |
| 247, 248 | 371 | Structures and Improvements | 274,427.36 | 306,129 |
| 249 | 372 | Office Furniture and Equipment | 195,911.07 | 217,548** |
| 252, 253, 256 | 373 | Transportation Equipment | 148,540.34 | 151,163** |
| 251 | 374 | Stores Equipment | 9,465.88 | 10,514 |
| 251, 256, 257 | 375 | Shop Equipment | 114,705.84 | 166,830 |
| 224, 257 | 376 | Laboratory Equipment | 1,070.22 | 1,070* |
| 257 | 377 | Tools and Work Equipment | 4,634.27 | 4,634* |
| 255 | 378 | Communication Equipment | 353,353.52 | 401,125** |
| 249, 257 | 379 | Miscellaneous Equipment | 1,171.98 | 1,172* |
| | | **Total General Plant (Jointly Used)** | **$ 1,201,468.20** | **$ 1,358,373** |
| | | **Total Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used)** | **$70,553,439.38** | **$106,240,226** |
| **Less: Property Used to Transport Coke Oven Gas** | | | | |
| | 330-4 | Rights of Way | $ 2,466.33 | $ 2,466* |
| | 333-1 | Field Lines | 54,876.63 | 77,956 |
| | 333-2 | Field Measuring and Regulating Station Equipment | 10,430.64 | 11,099 |
| | 351-12 | Land | 4,471.12 | 4,471* |
| | 351-23 | Rights of Way | 10,774.54 | 10,775* |
| | 352-2 | Compressor Station Structures | 85,659.91 | 118,152 |
| | 352-3 | Transmission System Measuring and Regulating Station Structures | 1,963.30 | 2,941 |
| | 353 | Mains | 310,963.02 | 462,743 |
| | 354-2 | Compressor Station Equipment | 330,481.17 | 441,230 |
| | 378 | Communication Equipment | 5,714.86 | 6,487** |
| | | Total Property Used to Transport Coke Oven Gas | $ 817,801.52 | $ 1,138,314 |
| | | **Total (Exclusive of Property Used to Transport Coke Oven Gas)** | **$69,735,637.86** | **$105,101,912** |

NOTES: * Not trended.
** Trended in part.
(A) Includes Account 331-1: Gas Well Structures.

**HOPE NATURAL GAS COMPAN**

**Original Cost and Original Cost Trended to**
**Of**
**Natural Gas Production Plant, Transmission Plant and Ge**
**Existing at December 31, 1938**

**Classification of Original Cost as Between Properties Constructed by the**

| Account Nos. Old | Account Nos. New W. Va. P. S. C. | Description | Cost Capitalized Per Hope Natural Gas Company Books | Original Cost of Property Constructed by Hope, Purchased from Non-Utilities or from Other Utilities where not an Operating Unit or System — Cost Capitalized per Hope Books: Per Books | Inventory, Transfer, and Correcting Adjustments | Direct Material and Labor Costs Not Capitalized | Unloading, Hauling and Warehouse Handling Costs | Indirect Field Costs | Overhead Costs |
|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) = (5) + (12) | (5) | (6) | (7) | (8) | (9) | (10) |
| **Natural Gas Production Plant** | | | | | | | | | |
| 204 | 330-1 | Natural Gas Producing Lands | $ — | $ — | $ 1,243.75 | $ 150.45 | $ — | $ — | $ 67.46 |
| 205 | 330-2 | Natural Gas Producing Leaseholds: | | | | | | | |
| | | Operated Leaseholds, Gas Rights and Royalties | 1,331,100.55 | 996,077.01 | 252,752.18 | 64,398.61 | — | — | 30,541.24 |
| | | Unoperated Leaseholds, Gas Rights and Royalties | 479,570.75 | 408,691.54 | 104,811.48 | 71,591.55 | — | — | 24,754.37 |
| 206 | 330-4 | Rights of Way | 530,476.17 | 504,191.07 | 8,673.72 | 107,448.27 | — | — | 28,029.07 |
| 204 | 330-5 | Other Land and Land Rights | 23,729.28 | 22,379.28 | *4,820.76*† | 375.75 | — | — | 933.26 |
| 209 | 331-2 | Field Measuring and Regulating Station Structures | 30,244.11 | 25,820.84 | *7,608.43* | 17,235.46 | — | — | 1,869.70 |
| 210 | 331-3 | Other Production System Structures | 177,682.39 | 175,186.87 | 13,540.09 | 87,981.12 | — | — | 9,338.85 |
| 211 | 332-1 | Producing Gas Wells—Well Construction (A) | 4,370,612.79 | 4,359,378.54 | *173,685.17* | 11,279,554.08 | — | 339,794.73 | 337,387.69 |
| 212 | 332-2 | Producing Gas Wells—Well Equipment | 7,893,605.30 | 7,326,669.23 | *219,793.49* | — | 208,253.60 | — | 265,529.41 |
| 213, 214 | 333-1 | Field Lines | 10,991,297.37 | 9,875,131.36 | *348,059.35* | 897,429.98 | 174,199.64 | 55,752.90 | 426,691.27 |
| 215, 217 | 333-2 | Field Measuring and Regulating Station Equipment | 244,176.06 | 239,046.35 | *50,166.49* | 63,113.14 | 1,182.26 | 901.35 | 11,255.08 |
| 216 | 334 | Drilling and Cleaning Equipment | 387,555.33 | 387,555.33 | 202,949.49 | — | — | — | 9,236.66 |
| 249, 251, 256, 257 | 337 | Other Production Equipment | — | — | 74,798.10 | 12,379.69 | — | — | 1,143.75 |
| | | **Total Natural Gas Production Plant** | $26,460,050.10 | $24,320,127.42 | $ *145,364.88* | $12,601,658.10 | $383,635.50 | $396,448.98 | $ 1,346,777.81 |
| **Transmission Plant** | | | | | | | | | |
| 218 | 351-12 | Land | $ 152,660.05 | $ 142,150.25 | $ 8,437.02 | $ 1,887.31 | $ — | $ — | $ 8,079.34 |
| 220 | 351-23 | Rights of Way | 551,354.41 | 551,354.41 | *159,852.40* | 13,306.92 | — | — | 20,195.06 |
| 221, 223 | 352-2 | Compressor Station Structures | 1,760,317.25 | 1,735,110.29 | *334,278.77* | 283,497.72 | — | — | 105,008.28 |
| 222 | 352-3 | Transmission System Measuring and Regulating Station Structures | 6,305.15 | 6,305.15 | 3,239.46 | 3,875.40 | — | — | 530.87 |
| 223 | 352-4 | Other Transmission System Structures | 6,709.29 | 6,709.29 | 66.40 | 4,133.11 | — | — | 599.77 |
| 226 | 353 | Mains | 14,614,229.98 | 13,692,381.83 | *91,009.03* | 182,149.84 | — | — | 893,488.28 |
| 224 | 354-2 | Compressor Station Equipment | 8,135,673.87 | 8,039,762.25 | *519,898.79* | 533,551.51 | — | — | 482,233.86 |
| 225 | 354-3 | Transmission System Measuring and Regulating Equipment | 26,234.00 | 26,234.00 | *8,618.09* | 7,781.40 | 49.02 | — | 1,267.15 |
| 249, 251, 256, 257 | 354-4 | Other Transmission System Equipment | — | — | 21,015.55 | 924.60 | — | — | 1,101.75 |
| | | **Total Transmission Plant** | $25,253,484.00 | $24,200,007.47 | $ *1,080,898.65* | $ 1,031,107.81 | $ 49.02 | — | $ 1,512,504.36 |

Notes: * Not trended.
** Trended in part.
(A) Includes Account 331-1: Gas Well Structures.
† ITALICS DENOTE RED FIGURES.

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**AL GAS COMPANY**

**Statement B**

**l Cost Trended to 1938 Prices**
**Of**
**ission Plant and General Plant (Jointly Used)**
**December 31, 1938**

**Constructed by the Company and Purchased by the Company**

| -Utilities or from m | | | Property Purchased by Hope from Other Utilities as an Operating Unit or System | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Original Cost | | | | | | | | |
| Overhead Costs | Total | Cost Capitalized Per Hope Books | Direct Material and Labor Costs to Other Utilities | Unloading, Hauling and Warehouse Handling Costs | Indirect Field Costs | Overhead Costs | Total | Total Original Cost | Weighted Average Trend To 1938 (1938 = 100) | Original Cost Trended to 1938 Prices |
| (10) | (11) = (5) to (10) incl. | (12) | (13) | (14) | (15) | (16) | (17) = (13) to (16) incl. | (18) = (11) + (17) | (19) = (18) ÷ (20) | (20) |
| $ 67.46 | $ 1,461.66 | $ — | $ 880.00 | $ — | $ — | $ 28.73 | $ 908.73 | $ 2,370.39 | — | $ 2,370* |
| 30,541.24 | 1,343,769.04 | 335,023.54 | 335,079.18 | — | — | 5,787.76 | 340,866.94 | 1,684,635.98 | — | 1,684,636* |
| 24,754.37 | 609,848.94 | 70,879.21 | 70,879.21 | — | — | 1,154.06 | 72,033.27 | 681,882.21 | — | 681,882* |
| 28,029.07 | 648,342.13 | 26,285.10 | 53,344.55 | — | — | 2,334.89 | 55,679.44 | 704,021.57 | — | 704,022* |
| 933.26 | 18,867.53 | 1,350.00 | 3,109.50 | — | — | 148.53 | 3,258.03 | 22,125.56 | — | 22,126* |
| 1,869.70 | 37,317.57 | 4,423.27 | 3,309.92 | — | — | 145.78 | 3,455.70 | 40,773.27 | 97.5 | 41,799 |
| 9,338.85 | 286,046.93 | 2,495.52 | 5,621.00 | — | — | 204.47 | 5,825.47 | 291,872.40 | 83.8 | 348,145 |
| 337,387.69 | 16,342,429.87 | 11,234.25 | 1,375,321.74 | — | 29,534.34 | 36,351.18 | 1,441,207.26 | 17,783,637.13 | 51.7 | 34,384,320 |
| 265,529.41 | 7,580,658.75 | 566,936.07 | 563,340.05 | 7,049.87 | — | 17,142.85 | 587,532.77 | 8,168,191.52 | 76.6 | 10,663,983 |
| 426,691.27 | 11,081,145.80 | 1,116,166.01 | 1,219,861.17 | 11,436.63 | 8,909.92 | 35,403.82 | 1,275,611.54 | 12,356,757.34 | 70.4 | 17,544,243 |
| 11,255.08 | 265,331.69 | 5,129.71 | 11,554.22 | 69.85 | 74.80 | 499.10 | 12,197.97 | 277,529.66 | 94.0 | 295,311 |
| 9,236.66 | 599,741.48 | — | 4,993.92 | — | — | 201.06 | 5,194.92 | 604,936.40 | 100.6 | 601,353** |
| 1,143.75 | 88,321.54 | — | 775.38 | — | — | 5.45 | 780.83 | 89,102.37 | 84.6 | 105,335 |
| $ 1,346,777.81 | $38,903,282.93 | $ 2,139,922.68 | $ 3,648,069.84 | $ 18,556.35 | $ 38,519.06 | $ 99,407.62 | $ 3,804,552.87 | $42,707,835.80 | 63.7 | $67,079,525 |
| $ 8,079.34 | $ 160,553.92 | $ 10,509.80 | $ 7,652.62 | — | — | $ 369.13 | $ 8,021.75 | $ 168,575.67 | — | $ 168,576* |
| 20,195.06 | 425,003.99 | — | 27,596.14 | — | — | 568.40 | 28,164.54 | 453,168.53 | — | 453,169* |
| 105,008.28 | 1,789,337.52 | 25,206.96 | 21,249.83 | — | — | 1,018.02 | 22,267.85 | 1,811,605.37 | 72.5 | 2,498,445 |
| 530.87 | 13,950.88 | — | — | — | — | — | — | 13,950.88 | 66.8 | 20,896 |
| 599.77 | 11,508.57 | — | — | — | — | — | — | 11,508.57 | 89.5 | 12,865 |
| 893,488.28 | 14,677,010.92 | 921,848.15 | 800,423.77 | — | — | 14,124.50 | 814,548.27 | 15,491,559.19 | 67.2 | 23,044,740 |
| 482,233.86 | 8,535,648.83 | 95,911.62 | 103,201.36 | — | — | 5,161.60 | 108,362.96 | 8,644,011.79 | 74.9 | 11,536,567 |
| 1,267.15 | 26,713.48 | — | — | — | — | — | — | 26,713.48 | 65.1 | 41,021 |
| 1,101.75 | 23,041.90 | — | — | — | — | — | — | 23,041.90 | 88.5 | 26,049 |
| $ 1,512,504.36 | $25,662,770.01 | $ 1,053,476.53 | $ 960,123.72 | — | — | $ 21,241.65 | $ 981,365.37 | $26,644,135.38 | 70.5 | $37,802,328 |

(Concluded on next page)

Exhibit No. 20—Antonelli



**HOPE NATURAL GAS COMPAN**

**Original Cost and Original Cost Trended to**
**Of**
**Natural Gas Production Plant, Transmission Plant and Ge**
**Existing at December 31, 1938**

**Classification of Original Cost as Between Properties Constructed by the**
**(concluded)**

| Account Nos. Old | Account Nos. New W. Va. P. S. C. | Description | Cost Capitalized Per Hope Natural Gas Company Books | Original Cost of Property Constructed by Hope, Purchased from Non-Utilities or from Other Utilities where not an Operating Unit or System: Cost Capitalized per Hope Books: Per Books | Inventory, Transfer, and Correcting Adjustments | Direct Material and Labor Costs Not Capitalized | Unloading, Hauling and Warehouse Handling Costs | Indirect Field Costs | Overhead Costs |
|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) = (5) + (12) | (5) | (6) | (7) | (8) | (9) | (10) |
| **General Plant (Jointly Used)** | | | | | | | | | |
| 244, 245 | 370 | Land and Land Rights | $ 154,590.82 | $ 141,226.54 | $ *64,809.61* | $ 298.51 | $ — | $ — | $ 2,754.53 |
| 247, 248 | 371 | Structures and Improvements | 262,605.30 | 251,534.26 | *28,836.61* | 21,750.51 | — | — | 17,360.48 |
| 249 | 372 | Office Furniture and Equipment | 239,989.32 | 239,808.52 | *61,305.98* | 14,875.59 | — | — | 2,369.11 |
| 252, 253, 256 | 373 | Transportation Equipment | 211,115.41 | 211,115.41 | *68,800.92* | 1,762.38 | — | — | 4,463.47 |
| 251 | 374 | Stores Equipment | — | — | 5,166.76 | 4,306.74 | — | — | 52.38 |
| 251, 256, 257 | 375 | Shop Equipment | — | — | 104,185.17 | 9,030.25 | — | — | 1,490.42 |
| 224, 257 | 376 | Laboratory Equipment | — | — | 1,063.40 | 40.00 | 0.52 | — | 26.30 |
| 257 | 377 | Tools and Work Equipment | 449,871.11 | 449,871.11 | *445,325.78* | — | — | — | 88.94 |
| 255 | 378 | Communication Equipment | 254,602.17 | 254,218.22 | — | 80,640.63 | — | — | 17,784.48 |
| 249, 257 | 379 | Miscellaneous Equipment | 20,484.22 | 20,484.22 | *19,336.38* | — | — | — | 24.14 |
| | | **Total General Plant (Jointly Used)** | $ 1,593,258.35 | $ 1,568,258.28 | $ *578,119.95* | $ 132,704.61 | $ 0.52 | — | $ 46,414.25 |
| | | **Total Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used)** | $53,306,792.45 | $50,088,393.17 | $ *1,804,383.48* | $13,765,470.52 | $383,685.04 | $396,448.98 | $ 2,905,696.42 |
| Less: **Property Used to Transport Coke Oven Gas** | | | | | | | | | |
| | 330-4 | Rights of Way | $ 1,511.33 | $ 1,511.33 | $ 1.25 | $ 771.10 | $ — | $ — | $ 182.65 |
| | 333-1 | Field Lines | 46,789.06 | 46,789.06 | *5,932.14* | 7,619.51 | 230.76 | 307.68 | 3,861.76 |
| | 333-2 | Field Measuring and Regulating Station Equipment | 10,087.67 | 10,087.67 | — | — | — | — | 342.97 |
| | 351-12 | Land | 2,999.00 | 2,999.00 | 1,250.00 | 41.86 | — | — | 180.26 |
| | 351-23 | Rights of Way | 3,936.58 | 3,936.58 | *432.53* | 6,928.89 | — | — | 341.60 |
| | 352-2 | Compressor Station Structures | 48,702.94 | 48,702.94 | *4,936.38* | 37,577.52 | — | — | 4,315.83 |
| | 352-3 | Transmission System Measuring and Regulating Station Structures | — | — | 1,337.40 | 565.38 | — | — | 60.52 |
| | 353 | Mains | 204,951.29 | 204,951.29 | 38,403.63 | 51,316.12 | — | — | 16,291.98 |
| | 354-2 | Compressor Station Equipment | 251,667.32 | 251,667.32 | *14,493.30* | 79,835.81 | — | — | 13,471.34 |
| | 378 | Communication Equipment | 5,481.61 | 5,481.61 | — | — | — | — | 233.25 |
| | | **Total Property Used to Transport Coke Oven Gas** | $ 576,126.80 | $ 576,126.80 | $ 17,197.93 | $ 184,656.19 | $ 230.76 | $ 307.68 | $ 39,282.16 |
| | | **Total (Exclusive of Property Used to Transport Coke Oven Gas)** | $52,730,665.65 | $49,512,266.37 | $ *1,821,581.41* | $13,580,814.33 | $383,454.28 | $396,141.30 | $ 2,866,414.26 |

Notes: * Not trended.
** Trended in part.
(A) Includes Account 331-1: Gas Well Structures.
† ITALICS DENOTE RED FIGURES.

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**PE NATURAL GAS COMPANY**

**Statement B (concluded)**

**and Original Cost Trended to 1938 Prices**
**Of**
**ant, Transmission Plant and General Plant (Jointly Used)**
**Existing at December 31, 1938**

**n Properties Constructed by the Company and Purchased by the Company**
**(concluded)**

| hased from Non-Utilities or from g Unit or System | | | Property Purchased by Hope from Other Utilities as an Operating Unit or System | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Original Cost | | | | | | | | | |
| Indirect Field Costs | Overhead Costs | Total | Cost Capitalized Per Hope Books | Direct Material and Labor Costs to Other Utilities | Unloading, Hauling and Warehouse Handling Costs | Indirect Field Costs | Overhead Costs | Total | Total Original Cost | Weighted Average Trend To 1938 (1938 = 100) | Original Cost Trended to 1938 Prices |
| (9) | (10) | (11) = (5) to (10) incl. | (12) | (13) | (14) | (15) | (16) | (17) = (13) to (16) incl. | (18) = (11) + (17) | (19) = (18) ÷ (20) | (20) |
| $ — | $ 2,754.53 | $ 79,469.97 | $ 13,364.28 | $ 17,817.50 | $ — | $ — | $ 900.25 | $ 18,717.75 | $ 98,187.72 | — | $ 98,188* |
| — | 17,360.48 | 261,808.64 | 11,071.04 | 12,157.71 | — | — | 461.01 | 12,618.72 | 274,427.36 | 89.6 | 306,129 |
| — | 2,369.11 | 195,747.24 | 180.80 | 162.69 | — | — | 1.14 | 163.83 | 195,911.07 | 90.1 | 217,548** |
| — | 4,463.47 | 148,540.34 | — | — | — | — | — | — | 148,540.34 | 98.3 | 151,163 |
| — | 52.38 | 9,465.88 | — | — | — | — | — | — | 9,465.88 | 90.0 | 10,514 |
| — | 1,490.42 | 114,705.84 | — | — | — | — | — | — | 114,705.84 | 68.8 | 166,830 |
| — | 26.30 | 1,070.22 | — | — | — | — | — | — | 1,070.22 | — | 1,070* |
| — | 88.94 | 4,634.27 | — | — | — | — | — | — | 4,634.27 | — | 4,634* |
| — | 17,784.38 | 352,643.33 | 383.95 | 679.33 | — | — | 30.86 | 710.19 | 353,353.52 | 88.1 | 401,125** |
| — | 24.14 | 1,171.98 | — | — | — | — | — | — | 1,171.98 | — | 1,172* |
| — | $ 46,414.25 | $ 1,169,257.71 | $ 25,000.07 | $ 30,817.23 | — | — | $ 1,393.26 | $ 32,210.49 | $ 1,201,468.20 | 88.4 | $ 1,358,373 |
| $396,448.98 | $ 2,905,696.42 | $65,735,310.65 | $ 3,218,399.28 | $ 4,639,010.79 | $ 18,556.35 | $ 38,519.06 | $ 122,042.53 | $ 4,818,128.73 | $70,553,439.38 | 66.4 | $106,240,226 |
| $ — | $ 182.65 | $ 2,466.33 | $ — | $ — | $ — | $ — | $ — | $ — | $ 2,466.33 | — | $ 2,466* |
| 307.68 | 3,861.70 | 54,876.63 | — | — | — | — | — | — | 54,876.63 | 70.4 | 77,950 |
| — | 342.97 | 10,430.64 | — | — | — | — | — | — | 10,430.64 | 94.0 | 11,099 |
| — | 180.26 | 4,471.12 | — | — | — | — | — | — | 4,471.12 | — | 4,471* |
| — | 341.60 | 10,774.54 | — | — | — | — | — | — | 10,774.54 | — | 10,775* |
| — | 4,315.83 | 85,659.91 | — | — | — | — | — | — | 85,659.91 | 72.5 | 118,152 |
| — | 60.52 | 1,963.30 | — | — | — | — | — | — | 1,963.30 | 66.8 | 2,941 |
| — | 16,291.98 | 310,963.02 | — | — | — | — | — | — | 310,963.02 | 67.2 | 462,743 |
| — | 13,471.34 | 330,481.17 | — | — | — | — | — | — | 330,481.17 | 74.8 | 441,230 |
| — | 233.25 | 5,714.86 | — | — | — | — | — | — | 5,714.86 | 88.1 | 6,487** |
| $ 307.68 | $ 39,282.16 | $ 817,801.52 | | | | | | | $ 817,801.52 | 71.8 | $ 1,138,314 |
| $396,141.30 | $ 2,866,414.26 | $64,917,509.13 | $ 3,218,399.28 | $ 4,639,010.79 | $ 18,556.35 | $ 38,519.06 | $ 122,042.53 | $ 4,818,128.73 | $69,735,637.86 | 66.4 | $105,101,912 |

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Statement H

## HOPE NATURAL GAS COMPANY

### Determination Of Trends Used To Ascertain Original Cost Trended To 1938 Prices

**1. Basic Trends**

To trend the original cost of the Company's properties to reflect 1938 material and labor prices certain basic trends hereinafter described were determined from the Company's records, supplemented where necessary from other labor and material price data. In applying these basic trends to the Company's various property accounts they were appropriately combined, when necessary, into composite trends to reflect the proportionate cost of labor and kinds of material in each account. All such composite trends were determined and applied on the basis of a careful study of the properties in each account and the full details appear in subsidiary trended original cost sheets.

The determination of the basic trends used is here briefly described, the details of this determination likewise appearing in subsidiary trended original cost sheets.

**2. Labor Trends**

Labor trends for pipe line and gas well construction from 1906 to 1938 were based on average Company rates paid to various classifications of labor. Prior to 1906, Company rates were available only for common labor and these rates were used as the basis for determining rates and trends for other classifications as explained below.

—56—

Average Company rates were determined from an analysis of payroll vouchers for the months of April, July and October and of payroll department records for each

year from 1906 to 1938. From these data, an adopted average daily rate was obtained which in turn was converted to an average hourly rate based on the schedule of working hours in effect in each year.

Individual trends were thus ascertained for the years 1906 to 1938 inclusive, for the following principal classifications of labor used for pipe line and gas well construction:

Driller
Tool Dresser
Roustabout
Laborer

(a) These individual trends for driller and for tool dresser were combined in the ratio of one to one to determine the composite trend for gas well construction. This ratio was based on the Company's experience in drilling operations.

(b) These individual trends for roustabout and for laborers were combined in the ratio of one to four to determine the composite trend for pipe line construction, the proportion being estimated from the typical Company gang setup in laying lines.

While comparable data was not available prior to 1906, payroll vouchers for certain transmission and field lines constructed by the Company and predecessor companies provided rates paid to common labor. From the prevailing rate in each year, a trend was determined for common labor from 1891 (when some purchased property now owned by the Company was built) to 1906 and this trend was used as the basis for determining rates and trends for other classifications of labor prior to 1906.

—57—

(c) In order to ascertain trends for building construction and equipment installation, field payroll vouchers for compressor station construction were examined for each year from 1901 to 1938 to obtain average rates paid by the

Company to the classes of labor in this type of work. Average hourly rates were thus determined for the following classifications of labor:

Carpenter
Electrician
Machinist
Laborer

Since more complete data was available on the rates paid to carpenters, the trend for this classification, after comparison with other skilled labor trends (electrician and machinist), was used as typical of skilled labor. This trend was then combined with the trend for unskilled labor (laborer) in the ratio of 2 to 3, respectively, to determine the composite trend used for all structures and equipment installations except measuring and regulator station equipment and telephone equipment, the proportion of skilled and unskilled labor being determined from an analysis of MacFarlan Compressor Station construction costs.

(d) The trends for the installation of field measuring and regulator station equipment were determined from unit cost developments, based on field estimates of the time required for various classifications of labor (foreman, utility man and roustabout) and team or truck, priced at average Company rates from payroll vouchers and payroll department records as noted above. The trends so determined for field stations were also used for the corresponding type of transmission stations.

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(e) Separate labor trends were not determined for the installation of telephone equipment, composite trends including both material and labor being used, the details of which appear in subsidiary trended original cost sheets.

(f) The trend for contract labor, used for the Clarksburg Office and Garage-Shop Building, was based on the index of union hourly wage rates for all building trades.

determined by the Industrial Relations Division, U. S. Department of Labor, Bureau of Labor Statistics, as published in the Engineering News Record of April 27, 1939.

### 3. Pipe Trends

The trend for steel line pipe from 1902 to 1938 was based on the weighted average trend for two, three, four, six and eight inch steel screw line pipe as determined primarily from the average delivered prices paid by the Company. In some instances, it was necessary to supplement these prices with the corresponding prices paid by affiliated companies served by the Purchasing Department of The Peoples Natural Gas Company. In a few cases, estimated prices were used, based on the available average Company prices, adjusted by the use of the steel line pipe trend developed from the average delivered prices paid by The Peoples Natural Gas Company.

Prior to 1902, the Company's price data was insufficient in detail to establish a trend. Pipe price data for wrought iron pipe up to 1899 and for steel pipe from 1900 to 1902, taken from Ford, Bacon & Davis, Inc. cost files, was used to establish a trend which was equalized to the



Company trend in 1904 and used as the basis for extending the Company price trend to earlier years.

The manufacture of steel pipe on a commercial basis began in 1900 and for this reason this year was adopted as the dividing point between steel and wrought iron pipe. The line pipe trend for the whole period to 1938 was expressed in terms of the price of steel pipe in 1938 so that the cost of all wrought iron pipe included in the original cost is thus converted to the equivalent cost of steel pipe in 1938, rather than the higher priced wrought iron.

**4. Casing and Tubing Trends**

The trend for casing and tubing from 1902 to 1938 was based on the weighted average trend for two and three inch tubing and 6⅝, 8¼ and 10 inch casing as determined primarily from the average delivered prices paid by the Company. Where prices were not available from Company records, supplementary prices were obtained as described above for line pipe.

The casing and tubing trend was extended back from 1902 on the basis of the line pipe trend explained above. As with line pipe, the trend for the entire period to 1938 was expressed in terms of the price of steel casing and tubing in 1938 and applied to the cost of all casing and tubing included in the original cost.

**5. Fitting Trends**

Separate trends were determined, based primarily on prices paid by the Company, for the following types of fittings:

—60—

Bull Plugs
Casing Heads
Dresser Couplings
Check Valves, brass (same as globe valves)
Globe Valves, brass
Nipples (same as line pipe)
Orifice Flanges
Orifice Plates
Regulators
Saddles
Stop Cocks, brass
Swedge Nipples

The Company's records of prices paid for other types of fittings do not sufficiently identify the particular kind and character of fitting or provide enough data in consecutive years with which to ascertain a trend. Consequently, price data obtained from Ford, Bacon & Davis, Inc. cost

files based on manufacturers' quotations were used to determine trends for the following:

Check Valves, iron
Fittings, screwed
Fittings, flanged
Gate Valves, screwed
Gate Valves, flanged
Gauges
Globe Valves, iron
Stop Cocks, iron

Company price records were available in most instances back to 1901 or some later year. To extend the price trends to prior years trends for corresponding types of fittings based on Ford, Bacon & Davis, Inc. cost data similar to that noted above were used.

**6. Equipment Trends**

Separate trends were determined for more than 25 different items of equipment such as gas compressors, gas engines, pumps, motors, generators, etc. More details than were obtainable from the Company's records were required to establish trends for these various items of equipment



and accordingly specific data available from Ford, Bacon & Davis, Inc. cost files was used as the primary basis for developing these trends from 1914 to 1938. In some cases specific data was available for as early as 1900. Where specific data could not be obtained to extend these trends prior to 1914 various appropriate bases were used depending on the type of equipment. For example, trends for gas compressors, gas engines, pumps, etc. were extended to earlier years on the basis of the trend for foundry iron, determined from the yearly average net cost per ton; the trends for electric motors, generators, etc. were extended back to 1900 on the basis of the trend for electric motors obtained from General Electric Company data as published

in the Building Committee Report of the New York-Pittsburgh Association of Valuation Engineers.

The bases described above were used for determining trends for all equipment except that included in the telephone account, the trends for which were based on the prices paid by the Company for the wire, poles, insulators, telephones, etc. included in the telephone installation. The methods of determining these trends are explained in the subsidiary trended original cost sheets.

### 7. Building Material Trends

Trends from 1901 to 1938 for the principal items of building material were based on average prices paid by the Company obtained from analysis of construction work performed by the Company. Trends were developed on this basis for the following materials:

—62—

Cement
Sand
Gravel
Corrugated Iron
Flat Sheet Iron

The Company records of prices paid for other building materials do not sufficiently identify the particular kind of material or provide enough data in consecutive years with which to determine a trend. The Building Committee Report of the New York-Pittsburgh Association of Valuation Engineers was used as the main source of price data for these materials for the period from 1901 to 1930, the trends so developed for approximately 50 different items being extended to 1938 by referring to prices published in the Engineering News Record and in bulletins of the United States Bureau of Labor Statistics, supplemented by data from the Ford, Bacon & Davis, Inc. cost files.

* * * * *

Statement J

## HOPE NATURAL GAS COMPANY

### Original Cost Trended to 1938 Prices of Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used) Existing at December 31, 1938

### Total By Years First Placed in Public Service

| Year First Placed in Public Service | Original Cost | Original Cost Trended to 1938 Prices | | | Approximate Weighted Average Trend (1938 = 100) |
|---|---|---|---|---|---|
| | | Not Trended | Trended (A) | Total | |
| (1) | (2) | (3) | (4) | (5) | (6) = (2) ÷ (5) |
| 1891 | $ 9,732 | $ — | $ 30,400 | $ 30,400 | 32.0 |
| 1892 | 203,822 | 1,214 | 486,643 | 487,857 | 41.8 |
| 1893 | 52,126 | 2,744 | 133,422 | 135,566 | 38.5 |
| 1894 | 74,419 | 681 | 191,866 | 192,547 | 38.6 |
| 1895 | 68,264 | 1,072 | 193,111 | 194,183 | 35.2 |
| 1896 | 26,292 | 101 | 81,672 | 81,773 | 32.2 |
| 1897 | 41,064 | 569 | 128,504 | 129,073 | 31.8 |
| 1898 | 40,043 | 1,133 | 99,732 | 100,865 | 39.7 |
| 1899 | 239,067 | 29,721 | 447,577 | 477,298 | 50.1 |
| 1900 | 177,521 | 7,619 | 417,297 | 424,916 | 41.8 |
| 1901 | 118,241 | 520 | 273,806 | 274,326 | 43.1 |
| 1902 | 1,229,574 | 388,718 | 1,839,403 | 2,228,121 | 55.2 |
| 1903 | 1,823,260 | 79,086 | 3,284,355 | 3,363,441 | 54.2 |
| 1904 | 2,088,446 | 46,900 | 4,205,102 | 4,252,002 | 49.1 |
| 1905 | 1,008,970 | 59,661 | 2,509,825 | 2,569,486 | 39.2 |
| 1906 | 440,829 | 19,921 | 957,492 | 977,413 | 45.1 |
| 1907 | 1,588,829 | 246,039 | 2,744,223 | 2,990,262 | 53.1 |
| 1908 | 796,342 | 124,406 | 1,454,305 | 1,578,711 | 50.4 |
| 1909 | 1,146,626 | 32,497 | 2,490,244 | 2,522,741 | 45.5 |
| 1910 | 2,150,919 | 185,497 | 4,346,665 | 4,532,162 | 47.5 |
| 1911 | 2,632,698 | 375,954 | 4,915,310 | 5,291,264 | 49.8 |
| 1912 | 1,429,618 | 62,359 | 3,151,430 | 3,213,789 | 44.5 |
| 1913 | 2,640,408 | 69,506 | 5,660,456 | 5,729,962 | 46.1 |
| 1914 | 1,691,034 | 58,832 | 3,728,864 | 3,787,696 | 44.6 |
| 1915 | 1,285,027 | 64,038 | 2,774,815 | 2,838,853 | 45.3 |
| 1916 | 2,247,279 | 164,450 | 3,882,538 | 4,046,968 | 55.5 |
| 1917 | 3,090,157 | 236,473 | 4,558,361 | 4,631,837 | 66.7 |
| 1918 | 2,732,017 | 71,354 | 3,483,126 | 3,554,480 | 76.9 |
| 1919 | 3,103,006 | 47,397 | 3,803,875 | 3,851,272 | 80.6 |
| 1920 | 2,507,985 | 28,483 | 2,731,058 | 2,759,541 | 90.9 |
| 1921 | 3,195,259 | 58,468 | 3,829,191 | 3,887,659 | 82.2 |
| 1922 | 1,031,019 | 29,995 | 1,428,939 | 1,458,934 | 70.7 |
| 1923 | 2,334,062 | 55,496 | 2,911,756 | 2,967,252 | 78.7 |
| 1924 | 3,065,508 | 101,052 | 3,458,500 | 3,559,552 | 86.1 |
| 1925 | 7,231,827 | 149,363 | 8,157,403 | 8,306,766 | 87.1 |

| | | | | | |
|---|---|---|---|---|---|
| 1891 | $ 9,732 | $ — | $ 30,400 | $ 30,400 | 32.0 |
| 1892 | 203,822 | 1,214 | 486,643 | 487,857 | 41.8 |
| 1893 | 52,126 | 2,144 | 133,422 | 135,566 | 38.5 |
| 1894 | 74,419 | 681 | 191,866 | 192,547 | 38.6 |
| 1895 | 68,264 | 1,072 | 193,111 | 194,183 | 35.2 |
| 1896 | 26,292 | 101 | 81,672 | 81,773 | 32.2 |
| 1897 | 41,664 | 569 | 128,504 | 129,073 | 31.8 |
| 1898 | 40,043 | 1,133 | 99,732 | 100,865 | 39.7 |
| 1899 | 239,067 | 29,721 | 447,577 | 477,298 | 50.1 |
| 1900 | 177,521 | 7,619 | 417,297 | 424,916 | 41.8 |
| 1901 | 118,241 | 520 | 273,806 | 274,326 | 43.1 |
| 1902 | 1,229,574 | 388,718 | 1,839,403 | 2,228,121 | 55.2 |
| 1903 | 1,823,260 | 79,086 | 3,284,355 | 3,363,441 | 54.2 |
| 1904 | 2,088,446 | 46,900 | 4,205,102 | 4,252,002 | 49.1 |
| 1905 | 1,008,070 | 59,661 | 2,509,825 | 2,569,486 | 39.2 |
| 1906 | 440,829 | 19,921 | 957,492 | 977,413 | 45.1 |
| 1907 | 1,588,829 | 246,039 | 2,744,223 | 2,990,262 | 53.1 |
| 1908 | 796,342 | 124,406 | 1,454,305 | 1,578,711 | 50.4 |
| 1909 | 1,146,626 | 32,497 | 2,490,244 | 2,522,741 | 45.5 |
| 1910 | 2,150,919 | 185,497 | 4,346,665 | 4,532,162 | 47.5 |
| 1911 | 2,632,698 | 375,954 | 4,915,310 | 5,291,264 | 49.8 |
| 1912 | 1,429,618 | 62,359 | 3,151,430 | 3,213,789 | 44.5 |
| 1913 | 2,640,408 | 69,506 | 5,660,456 | 5,729,962 | 46.1 |
| 1914 | 1,691,034 | 58,832 | 3,728,864 | 3,787,696 | 44.6 |
| 1915 | 1,285,027 | 64,038 | 2,774,815 | 2,838,853 | 45.3 |
| 1916 | 2,247,279 | 164,430 | 3,882,538 | 4,046,968 | 55.5 |
| 1917 | 3,090,157 | 76,473 | 4,558,364 | 4,634,837 | 66.7 |
| 1918 | 2,732,017 | 71,354 | 3,483,126 | 3,554,480 | 76.9 |
| 1919 | 3,103,006 | 47,397 | 3,803,875 | 3,851,272 | 80.6 |
| 1920 | 2,507,985 | 28,483 | 2,731,058 | 2,759,541 | 90.9 |
| 1921 | 3,195,259 | 58,468 | 3,829,491 | 3,887,959 | 82.2 |
| 1922 | 1,031,019 | 29,995 | 1,428,939 | 1,458,934 | 70.7 |
| 1923 | 2,334,062 | 55,496 | 2,911,756 | 2,967,252 | 78.7 |
| 1924 | 3,065,508 | 101,052 | 3,458,500 | 3,559,552 | 86.1 |
| 1925 | 7,231,827 | 149,363 | 8,157,403 | 8,306,766 | 87.1 |
| 1926 | 2,484,197 | 187,011 | 2,565,014 | 2,752,025 | 90.3 |
| 1927 | 2,040,911 | 123,354 | 2,150,738 | 2,274,092 | 89.7 |
| 1928 | 1,155,524 | 23,254 | 1,302,199 | 1,325,453 | 87.2 |
| 1929 | 1,734,331 | 174,526 | 1,723,355 | 1,897,881 | 91.4 |
| 1930 | 1,395,355 | 25,931 | 1,615,465 | 1,641,396 | 85.0 |
| 1931 | 471,244 | 37,393 | 516,000 | 553,393 | 85.2 |
| 1932 | 226,955 | 12,283 | 262,132 | 274,415 | 82.7 |
| 1933 | 186,770 | 7,470 | 217,644 | 225,114 | 83.0 |
| 1934 | 2,390,533 | 312,361 | 2,317,183 | 2,629,544 | 90.9 |
| 1935 | 338,156 | 24,660 | 338,905 | 363,565 | 93.0 |
| 1936 | 2,591,508 | 109,784 | 2,737,333 | 2,847,117 | 91.0 |
| 1937 | 1,136,838 | 99,062 | 1,064,176 | 1,163,238 | 97.7 |
| 1938 | 860,725 | 44,056 | 816,669 | 860,725 | 100.0 |
| | $70,553,439 | $3,821,844 | $102,418,382 | $106,240,226 | 66.4 |

NOTE: (A) Includes accounts only partially trended.

**8. COMMISSION WITNESSES PACE'S AND DUNN'S EXHIBIT NO. 57 ENTITLED: "Original Cost of Gas Plant as at December 31, 1938, Volume I"**

Docket G-113

**HOPE NATURAL GAS COMPANY**

ORIGINAL COST OF GAS PLANT
AS AT DECEMBER 31, 1938

VOLUME I

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| 22 | Account 354-3, Measuring and Regulating Stations Equipment | 47 |
| 23 | Account 354-4, Other Transmission System Equipment | 48 |

| Schedule | Description | Page |
|---|---|---|
| | *General Plant—Capitalized Cost Per Books and as Adjusted as at December 31, 1938* | |
| 24 | Account 370, Land | 49 |
| 25 | Account 371, Structures and Improvements | 50 |
| 26 | Account 372, Office Furniture and Equipment | 51 |
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| 28 | Account 374, Stores Equipment | 53 |
| 29 | Account 375, Shop Equipment | 54 |
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| 31 | Account 377, Tools and Work Equipment | 56 |
| 32 | Account 378, Communication Equipment | 57 |
| 33 | Account 379, Miscellaneous Equipment | 59 |
| 34 | Account 100-4, Gas Plant Held for Future Use—Summary of Amounts Transferred by Examiner as at December 31, 1938 | 60 |
| 35 | Account 107, Gas Plant Adjustments—Details of Account as at December 31, 1938 | 61 |
| 36 | Other Physical Property—Coal Property. Investment as at December 31, 1938 | 62 |
| 37 | Franchises, Patent Rights and Other Intangibles—Details of Investment as at December 31, 1938 | 63 |

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## WRITTEN STATEMENT

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Natural Gas Company has been made, and, as a result, this report on the original cost of the Gas Plant of the Company is submitted.

This report is in two parts. Volume I sets forth the investment of Hope Natural Gas Company in Gas Plant per Company books and as adjusted, as of December 31, 1938. The adjusted figures show the original cost as defined in the Federal Power Commission's Uniform System of Accounts for Natural Gas Companies of the gas plant. Volume II contains a detailed explanation of the staff adjustments.

On January 1, 1939, there became effective and applicable to the Company a new Uniform System of Accounts for Gas Utilities prescribed by the Public Service Commission of West Virginia. In July, 1938, the Company began an investigation and study of its records for the purpose of stating in its Gas Plant Accounts the cost of its properties and to reflect the amount of such cost in each primary account as prescribed by said Commission.

The results of this investigation and study made by

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the Company, were made available to the accountants of the Federal Power Commission during May, 1940. An inventory of the existing property at December 31, 1938, was made by the Company and priced at what the Company claims was original cost. The results of this inventory, among other things, necessitated numerous reclassifications of costs, adjustment of prior distribution of certain costs and correction of certain accounting errors, all of which

have been examined by the Commission's staff of accountants.

There is presented immediately hereinafter a condensed balance sheet of the Company as reflected by the books of account at December 31, 1938, before any adjustments, in order to set forth the capitalized cost of Gas Plant per books on that date:

—3—

| *Assets* | *Amount* |
|---|---|
| Gas Plant: | |
| Gas Plant in Service | $56,101,875.49 |
| Construction Work in Progress | 81,392.75 |
| Gas Plant Adjustment | 94,814.75 |
| Coal Property | 341,529.68 |
| Franchises, Patent Rights and Other Intangibles | 30,185.91 |
| Total Gas Plant | $56,649,798.58 |
| Investment and Fund Accounts | 3,796,362.25 |
| Current and Accrued Assets | 15,460,687.85 |
| Deferred Debits | 5,002.28 |
| Total Assets and Other Debits | $75,911,850.96 |
| *Liabilities* | |
| Capital Stock | $27,969,300.00 |
| Current and Accrued Liabilities | 1,971,351.32 |
| Deferred Credits | 3,167.89 |
| Contributions in Aid of Construction | 540.87 |
| Reserves: | |
| Depreciation and Depletion—Utility Plant | 40,759,450.48 |
| Other | 13,932.63 |
| Surplus—Earned | 5,194,107.77 |
| Total Liabilities and Other Credits | $75,911,850.96 |

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As shown on the preceding balance sheet, the Capitalized Cost of Gas Plant as of December 31, 1938, was $56,649,798.58, of which $56,101,875.49 represented Gas Plant in Service, summarized by functions as follows:

| | |
|---|---|
| Production Plant | $26,460,050.10 |
| Transmission Plant | 25,253,484.00 |
| Distribution Plant | 2,795,083.04 |
| General Plant | 1,593,258.35 |
| Total | $56,101,875.49 |

This report deals with the cost of the production plant, transmission plant, and general plant, although a cursory examination was made of the distribution plant. The following summary sets forth the cost per Company books, reclassified by the Company as shown by Schedule I, Page .... of this report, and as adjusted by the examiners:

| *Particulars* | *Cost Per Book* | *Examiners' Adjustments* | *As Adjusted* |
|---|---|---|---|
| Production Plant | $26,718,065.06 | ($ 384,673.83) | $26,333,391.23 |
| Transmission Plant | 25,279,965.69 | ( 1,414,567.34) | 23,865,398.35 |
| General Plant | 1,308,761.70 | ( 299,930.64) | 1,008,831.06 |
| Total | $53,306,792.45 | ($2,099,171.81) | $51,207,620.64 |

Schedule I of this report sets forth the total cost of Gas Plant in Service per Company books, Company's reclassification adjustments, Examiners' (F.P.C. staff) adjustments and the resulting adjusted balances, representing original cost as defined in the Commission's System of Accounts.

This schedule has been constructed to show separately the total cost of the production plant, transmission plant and general plant, representing the cost dealt with in this

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report. The total cost per books, in this respect, of $53,306,792.45, corresponds with that shown by Exhibit 20, page 32, column 4.

Attention is called to the total examiners' adjustments of $2,099,171.81, representing a credit to the total capitalized cost of Gas Plant in Service, exclusive of distribution plant. This amount represents the net adjustment made by the examiners and is arrived at by the difference between credit adjustments, amounting to $5,883,085.12 and debit adjustments of $3,783,913.31, and is summarized by classes as follows:

| *Description* | *Amount* |
|---|---|
| Company adjustments per Exhibit 20 | $(1,804,383.48) |
| Company adjustments—Prior Utility Acquisitions | ( 232,930.69) |
| Correction of accounting errors | 1,480,227.70 |
| Transfers to accounts other than Gas Plant in Service | (1,542,085.34) |
| Examiners' adjustment—Net Credit | $(2,099,171.81) |

Schedule 1-A sets forth all adjustments by sources, showing contra accounts involved. It also identifies the adjusting journal entries which are given in Volume II.

The total original cost of Gas Plant in Service, exclusive of distribution plant, at December 31, 1938, is summarized in the following tabulation which shows separately acquisitions of properties classed as operating units or systems.

| | | |
|---|---|---|
| Company constructed and purchases from non-utilities: | | |
| Cost per Books | $50,088,393.17 | |
| Adjustments | (1,866,241.12) | |
| As adjusted | | $48,222,152.05 |
| —6— | | |
| Acquisitions of Prior Utilities: | | |
| Cost per books | $3,218,399.28 | |
| Adjustments | (232,930.69) | |
| As adjusted | | $ 2,985,468.59 |
| Total as adjusted—Dec. 31, 1938 | | $51,207,620.64 |

The above tabulation has been made, to focus attention on properties acquired from prior utilities. As shown above and also by Exhibit 20, page 32, column 12, the cost capitalized per Company books for this class of acquisitions is $3,218,399.28. By repricing these same properties, the Company arrives at a cost of $4,639,010.78, as shown by Exhibit 20, page 32, column 13. This repricing would result in an increase in cost recorded in plant accounts of $1,420,611.50. The Company adjustments or repricing are not concurred in. The only adjustments to this class of property approved by the examiners are shown in the above tabulation ($232,930.69). They represent Company adjustments to reclassify capitalized cost and correct accounting errors.

An analysis of approximately ninety percent of such acquisitions and a careful examination of all vouchers, books and data available, together with consideration of each individual acquisition, leads to the conclusion there is no justification for any adjustments whereby the amounts now recorded in plant accounts would be increased. It is the opinion of the examiners that the amounts recorded at the time of acquisition represent the original cost as near as can be determined.

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The total proposed adjustment to this class of property, developed by the original cost study made by the Company, included a credit of $967,151.87, classified as follows:

| | |
|---|---|
| Credit plant accounts—Accrued Depreciation | $(746,851.51) |
| Estimated costs of obtaining | 10,917.50 |
| Estimated costs of construction | 1,712.83 |
| Correction of accounting errors | (232,930.69) |
| Total | $(967,151.87) |

Of the above proposed adjustments, the examiners have approved only the correction of accounting errors representing a credit to Capitalized Cost of $232,930.69.

Schedules 2 to 33, inclusive, set forth the investment in gas plant, exclusive of distribution plant, by accounts, showing the cost per books, staff adjustments, and the adjusted or original cost balances. These schedules are the result of a detailed examination made by the Commission's staff of accountants of the books, records, and documents of the Company, including the Company's Original Cost study. The adjustments include the reclassification of items shown in Schedule 1.

Schedule No. 34 is a summary of amounts transferred to Account 100.4, Gas Plant Held for Future Use, of the Commission's Uniform System of Accounts.

Schedule No. 35 is a statement of Account 107, Gas Plant Adjustments, showing the source of data and manner of determining amounts by the Company.

Schedule No. 36 is a statement of Investment in Coal Property. This investment was included in Gas Plant as of December 31, 1938 by the Company, although not in-



cluded as a part of the original cost claimed per Exhibit 20. No adjusting entry has been proposed by the Company to transfer this cost to other accounts. This item has been eliminated from Gas Plant by the examiners and transferred to Account 110, Other Physical Property, by Balance Sheet Journal Entry No. 100.

Schedule No. 37 is a summary of an account designated by the Company as "Franchises, Patent Rights and Other Intangibles" and was included in Gas Plant as of December 31, 1938. An analysis of this account discloses that it consists of three items as follows:

*Patent Rights:*

| | |
|---|---|
| Thermo-syphon system for gasoline absorption plant | $ 458.66 |
| *Contracts and Franchises:* | |
| Acquired in acquisition of Clarksburg Light and Heat Co. | 5,811.64 |
| *Contract for Gas:* | |
| Hamilton Gas Corporation | 23,915.61 |
| Total | $30,185.91 |

The first two items shown above have been eliminated from Gas Plant by the Examiners and charged to Surplus by Balance Sheet Journal Entry No. 101.

The third item has also been eliminated from Gas Plant and transferred to Account 146, Other Deferred Debits, by Balance Sheet Journal Entry No. 101.

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Volume II of this report, as stated hereinbefore, deals with adjustments made by the examiners and includes a summary of all adjustments, together with adjusting journal entries and a detailed explanation of each.

JOHN W. PACE,
*Senior Examiner of Accounts.*

EDWARD L. DUNN,
*Examiner in Charge of Field Assignment.*

Clarksburg, West Virginia
February 20, 1941

Approved:

W. E. BAKER,
*Chief Accountant.*

CHAS. W. SMITH,
*Chief, Bureau of Accounts, Finance and Rates.*

## HOPE NATURAL GAS COMPANY

### Investment in Gas Plant Per Books and As Adjusted As At December 31, 1938

| Schedule No. | Account Number | Description | Cost Per Books | Reclassification by Company Dr. | Reclassification by Company Cr. | Cost per Books Reclassified | Examiners' Adjustments Dr. | Examiners' Adjustments Cr. | As Adjusted |
|---|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| | | **Natural Gas Production Plant** | | | | | | | |
| 2 | 330.1 | Natural Gas Producing Lands | $ — | $ 3,319.84 | $ — | $ 3,319.84 | $ — | $ — | $ 3,319.84 |
| | 330.2 | Natural Gas Producing Leaseholds— | | | | | | | |
| 3 | | Operated | 1,331,100.55 | — | — | 1,331,100.55 | 267,904.31 | — | 1,599,004.86 |
| 4 | | Unoperated | 479,570.75 | — | — | 479,570.75 | 104,811.48 | 584,382.23 | — |
| 5 | 330.4 | Rights of Way | 530,476.17 | 9,412.94 | 8,978.33 | 530,910.78 | 181,930.98 | 67,450.29 | 645,391.47 |
| 6 | 330.5 | Other Land and Land Rights | 23,729.28 | 8,866.78 | 7,993.90 | 24,602.16 | — | 3,593.64 | 21,008.52 |
| 7 | 331.2 | Field Measuring and Regulating Station Structures | 30,244.11 | 3,894.08 | 5,520.62 | 28,617.57 | 651.94 | 8,130.59 | 21,128.92 |
| 8 | 331.3 | Other Production System Structures | 177,682.39 | 65,418.75 | 29,937.20 | 213,163.94 | 5,691.31 | 27,666.44 | 191,188.81 |
| 9 | 332.1 | Producing Gas Wells—Well Construction | 4,370,612.79 | — | 3,679.04 | 4,366,933.75 | 391,689.83 | 669,145.87 | 4,089,477.71 |
| 10 | 332.2 | Producing Gas Wells—Well Equipment | 7,893,605.30 | — | 8,023.71 | 7,885,581.59 | 8,078.12 | 283,149.96 | 7,610,509.75 |
| 11 | 333.11 | Field Lines: Construction | 3,040,755.47 | 35,999.16 | 38,233.64 | 3,038,520.99 | 921,753.13 | 337,784.54 | 3,622,489.58 |
| 12 | 333.12 | Equipment | 7,950,541.90 | 29,637.87 | 13,137.24 | 7,967,042.53 | 317,703.03 | 610,493.74 | 7,674,251.82 |
| 13 | 333.2 | Field Measuring and Regulating Station Equipment | 244,176.06 | 15,753.87 | — | 259,929.93 | 6,734.51 | 82,279.41 | 184,385.03 |
| 14 | 334 | Drilling and Cleaning Equipment | 387,555.33 | 156,184.60 | — | 543,739.93 | 52,752.85 | 800.07 | 595,692.71 |
| 15 | 337 | Other Production Equipment | — | 45,030.75 | — | 45,030.75 | 31,758.09 | 1,256.63 | 75,532.21 |
| | | Total Gas Production Plant | 26,460,050.10 | 373,518.64 | 115,503.68 | 26,718,065.06 | 2,291,459.58 | 2,676,133.41 | 26,333,391.23 |
| | | **Transmission Plant** | | | | | | | |
| 16 | 351.12 | Land | 152,660.05 | 13,624.99 | 5,163.97 | 161,121.07 | 7,116.64 | 5,325.50 | 162,912.21 |
| 20 | 351.23 | Rights of Way | 551,354.41 | 697.91 | 56,331.85 | 495,720.47 | 52,298.61 | 156,776.39 | 391,242.69 |
| 17 | 352.2 | Compressor Station Structures | 1,760,317.25 | 489,844.60 | 539,885.67 | 1,710,276.18 | 102,623.88 | 371,017.68 | 1,441,882.38 |
| 18 | 352.3 | Measuring and Regulating Station Structures | 6,305.15 | 5,873.14 | 779.79 | 11,398.50 | 151.55 | 3,342.84 | 8,207.21 |
| 19 | 352.4 | Other Transmission System Structures | 6,709.29 | 997.85 | 359.03 | 7,348.11 | — | 572.42 | 6,775.69 |
| 20 | 353 | Mains | 14,614,229.98 | 296,750.65 | 292,513.14 | 14,618,467.49 | 556,162.13 | 1,042,554.90 | 14,132,074.72 |
| 21 | 354.2 | Compressor Station Equipment | 8,135,673.87 | 273,378.24 | 178,069.38 | 8,230,982.73 | 684,614.14 | 1,231,924.88 | 7,683,671.99 |
| 22 | 354.3 | Measuring and Regulating Station Equipment | 26,234.00 | 5,190.65 | 1,961.90 | 29,462.75 | 3,044.23 | 14,891.07 | 17,615.91 |
| 23 | 354.4 | Other Transmission System Equipment | — | 15,188.39 | — | 15,188.39 | 5,827.16 | — | 21,015.55 |
| | | Total Transmission Plant | 25,259,484.00 | 1,101,546.42 | 1,075,064.73 | 25,279,965.69 | 1,411,838.34 | 2,826,405.68 | 23,865,398.35 |
| | | **General Plant** | | | | | | | |
| 24 | 370 | Land and Land Rights | 154,590.82 | 43.13 | 27,956.22 | 126,677.73 | 7,202.00 | 36,898.52 | 96,981.21 |
| 25 | 371 | Structures and Improvements | 262,605.30 | 26,385.90 | 51,667.86 | 237,323.34 | 2,176.81 | 13,612.37 | 225,887.78 |
| 26 | 372 | Office Furniture and Equipment | 239,989.32 | — | — | 239,989.32 | 13,516.77 | 74,822.75 | 178,683.34 |
| 27 | 373 | Transportation Equipment | 211,115.41 | 3,951.90 | 53,636.30 | 161,431.01 | 2,779.07 | 21,895.59 | 142,314.49 |
| 28 | 374 | Stores Equipment | — | 3,321.00 | — | 3,321.00 | 1,989.50 | 203.74 | 5,106.76 |
| 29 | 375 | Shop Equipment | — | 63,168.92 | — | 63,168.92 | 43,106.82 | 2,090.57 | 104,185.17 |
| 30 | 376 | Laboratory Equipment | — | 1,003.40 | — | 1,003.40 | — | — | 1,003.40 |
| 31 | 377 | Tools and Work Equipment | 449,871.11 | — | 249,110.52 | 200,760.59 | 9,319.42 | 205,534.68 | 4,545.33 |
| 32 | 378 | Communication Equipment | 254,602.17 | — | — | 254,602.17 | — | 5,626.43 | 248,975.74 |
| 33 | 379 | Miscellaneous Equipment | 20,484.22 | — | — | 20,484.22 | 525.00 | 19,861.38 | 1,147.84 |
| | | Total General Plant | 1,593,258.35 | 97,874.25 | 382,370.90 | 1,308,761.70 | 80,615.39 | 380,546.93 | 1,008,831.06 |
| | | Total Gas Plant (Exclusive of Distribution) | $53,306,792.45 | $1,572,939.31 | $1,572,939.31 | $53,306,792.45 | $3,783,913.31 | $5,883,085.12 | $51,207,620.64 |

Docket G-113

## HOPE NATURAL GAS COMPANY

### Investment in Gas Plant Per Books and as Adjusted
### As at December 31, 1938

Schedule No. 1
Sheet 2 of 2

| Schedule No. | Account Number | Description | Cost Per Books | Reclassification by Company Dr. | Reclassification by Company Cr. | Cost Per Books Reclassified | Examiners' Adjustments Dr. | Examiners' Adjustments Cr. | As Adjusted |
|---|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| | | **Total Gas Plant** (Exclusive of Distribution Plant) | $53,306,792.45 | $1,572,939.31 | $1,572,939.31 | $53,306,792.45 | $3,783,913.31 | $5,883,085.12 | $51,207,620.64 |
| | | **Distribution Plant** | | | | | | | |
| | 357.1 | Land | 19,151.18 | | | | | | |
| | 357.22 | Rights of Way | 17,818.40 | | | | | | |
| | 358.1 | Measuring and District Regulating Station Structures | 34,352.87 | | | | | | |
| | 358.2 | Other Distribution System Structures | 84,840.06 | | | | | | |
| | 359.1 | Mains—Construction | 625,556.29 | | | | | | |
| | 359.21 | Mains—Pipe | 1,155,526.53 | | | | | | |
| | 359.22 | Mains—Fittings | 152,376.28 | | | | | | |
| | 360 | Pumping and Regulating Equipment | 51,388.06 | | | | | | |
| | 361 | Services | 184,496.15 | | | | | | |
| | 362 | Meters | 469,198.31 | | | | | | |
| | 363 | Meter Installations | 378.91 | | | | | | |
| | | Total Distribution Plant | 2,795,083.04 | | | 2,795,083.04 | 19,995.41 | | 2,815,078.45 |
| | 100.1 | **Total Utility Plant in Service** | 56,101,875.49 | | | 56,101,875.49 | 3,803,908.72 | 5,883,085.12 | 54,022,699.09 |
| | 100.3 | Construction Work in Progress | 81,392.75 | | | 81,392.75 | 16.65 | | 81,409.40 |
| 34 | 100.4 | Gas Plant Held for Future Use | — | | | — | 789,118.73 | | 789,118.73 |
| 35 | 107 | Gas Plant Adjustments | 94,814.75 | | | 94,814.75 | | | 94,814.75 |
| 36 | | Other Physical Property—Coal Property (100) | 341,529.68 | | | 341,529.68 | | 341,529.68 | — |
| 37 | | Franchises, Patent Rights and Other Intangibles (101) | 30,185.91 | | | 30,185.91 | | 30,185.91 | — |
| | | **Total Gas Plant** | $56,649,798.58 | | | $56,649,798.58 | $4,593,027.45 | $6,254,800.71 | $54,988,041.97 |

**Note: Distribution Plant Accounts have not been examined in detail.**

Docket G-113

# HOPE NATURAL GAS COMPANY

## Summary of Examiners' Journal Entries Adjusting Plant Accou
## Showing Types of Adjustments and Contra Accounts Affected

| A. J. E. No. | Description | Total Examiners' Adjustments: Company's Adjustments Per Original Cost Study (Exhibit 20) | Company's Adjustments To Prior Utility Purchases: A. J. E. No. | Company's Adjustments To Prior Utility Purchases: Amount | Examiners' Other Adjustments | Total Examiners' Adjustments | 100-4 Utility Plant Held For Future Use | 110 Other Physical Property |
|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| | **Company Adjustments Accepted By Examiners:** | | | | | | | |
| 300 | Transfers to and from utility plant in service accounts. *Debits* — $ 466,187.96 *Credits* — (466,187.96) | | | | | | | |
| 301 | Adjustments to agree with adopted inventory | $( 179,769.12) | 326 | $( 8,227.19) | | $( 187,996.31) | | |
| 302 | Capitalized structures or materials removed | ( 269,273.27) | 327 | ( 5,831.43) | | ( 275,104.70) | | |
| 303 | Depreciation on purchased property | ( 412,186.80) | | | | ( 412,186.80) | | |
| 304 | Abandoned—Still on books | ( 78,905.51) | 329 | ( 20,336.25) | | ( 99,241.76) | | |
| 305 | Items on books found in storage | ( 37,464.60) | | | | ( 37,464.60) | | $ 25.75 |
| 306 | Transfers to and from other than utility plant in service accounts | ( 211,080.04) | | | | ( 211,080.04) | $ 13,967.21 | 55,505.81 |
| 307 | Adjustments of vouchers M-699 and A-155 estimates | ( 158,767.75) | 331 | ( 67,101.74) | | ( 225,869.49) | | |
| 308 | Voucher charges to investment not in ledger | 69,559.52 | | | | 69,559.52 | | |
| 309 | Correction of voucher amounts and records | 53,805.31 | 332 | ( 48,145.03) | | 5,660.28 | | |
| 310 | Estimated cost of obtaining | 11,814.46 | | | | 11,814.46 | | |
| 311 | Recording costs—From original papers | 5,719.50 | | | | 5,719.50 | | |
| 312 | Damages due to maintenance | ( 8,402.43) | | | | ( 8,402.43) | | |
| 313 | Removal of amounts shown on books—No equipment added at corresponding time, repairs, or could not identify charges on vouchers | ( 11,284.41) | | | | ( 11,284.41) | | |
| 314 | Improper charges and credits | 51,003.29 | 333 | ( 1.00) | | 51,002.29 | | |
| 315 | To restore original cost | 38,992.16 | | | | 38,992.16 | | |
| 316 | Repairs and replacements | ( 79,832.19) | | | | ( 79,832.19) | | |
| 317 | Fleet owners and quantity discounts | ( 2,227.40) | | | | ( 2,227.40) | | |
| 318 | Unproductive drilling deeper | ( 72,473.08) | | | | ( 72,473.08) | | |
| 319 | Removal of rig charges | ( 429,707.12) | | | | ( 429,707.12) | | |
| 319 | Arbitrary rig charges added | 391,230.00 | | | | 391,230.00 | | |
| 320 | Retirement of well construction—Change of well equipment | ( 12,576.26) | | | | ( 12,576.26) | | |
| 321 | Adjustment for lines taken up | ( 344,550.43) | 334 | ( 24,257.94) | | ( 368,808.37) | | |
| 322 | Unretired labor | ( 263,977.16) | | | | ( 263,977.16) | | |
| 323 | Transfer to distribution system | ( 19,678.07) | | | | ( 19,678.07) | | |
| 324 | To balance with books | 167,236.40 | 335 | ( 57,953.77) | | 109,282.63 | | |
| 325 | Miscellaneous small adjustments | ( 1,588.48) | | | | ( 1,588.48) | | |
| -- | Transfers to and from utility plant in service accounts. *Debits* — $ 8,797.21 *Credits* — (8,797.21) | | 328 | — | | — | | |
| -- | Abandoned lines not removed | | 330 | ( 1,076.34) | | ( 1,076.34) | | |
| | **Examiners' Adjustments:** | | | | | | | |
| 336 | To reinstate construction costs expensed | | | | $ 1,480,227.70 | 1,480,227.70 | | |
| 337 | To transfer adjusted cost of property used to transport coke oven gas | | | | ( 762,592.06) | ( 762,592.06) | | 762,592.06 |
| 338 | To transfer to "Utility Plant Held For Future Use," the adjusted cost of field lines connected to non-producing wells. | | | | ( 21,126.61) | ( 21,126.61) | 21,126.61 | |
| 339 | To realize depreciation on retirements of prior utility property | | | | ( 3,106.27) | ( 3,106.27) | | |
| 340 | To transfer to "Other Physical Property," cost of sites formerly used for compressing stations | | | | ( 901.50) | ( 901.50) | | 901.50 |
| 341 | To transfer to "Utility Plant Held For Future Use," the adjusted cost of unoperated leaseholds | | | | ( 584,382.23) | ( 584,382.23) | 584,832.23 | |
| 342 | To transfer to "Utility Plant Held For Future Use," the cost of wells not connected to utility plant | | | | ( 169,642.68) | ( 169,642.68) | 169,642.68 | |
| 343 | Transfer to construction work in progress—Account 100-3 | | | | ( 16.65) | ( 16.65) | | |
| 344 | Transfer from production plant to transmission plant. (Dr. & Cr. $6,965.64) | | | | — | — | | |
| 345 | Transfer within general plant. (Dr. & Cr. $7,200.00) | | | | — | — | | |
| 346 | To transfer additional cost of prior units to distribution system | | | | ( 317.34) | ( 317.34) | | |
| | **Total Examiners' Adjustments** | $(1,804,383.48) | | $( 232,930.69) | $( 61,857.64) | $(2,099,171.81) | $789,118.73 | $819,025.12 |

**HOPE NATURAL GAS COMPANY**

**' of Examiners' Journal Entries Adjusting Plant Accounts**

**ng Types of Adjustments and Contra Accounts Affected**

**Schedule No. 1-A**

| aminers' Other ustments | Total - Examiners' Adjustments | 100-4 Utility Plant Held For Future Use | 110 Other Physical Property | 100-3 Construction Work In Progress | 144 Retirement Work In Progress | 250-1 Reserve For Depreciation Of Utility Plant | 250-2 Res. For Amort. And Depl. of Prod. Nat. Gas Lands And Land Rights | 250-3 Reserve For Abandoned Leases | 271 Earned Surplus | Distribution Plant |
|---|---|---|---|---|---|---|---|---|---|---|
| (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) |
| | $( 187,996.31) | | | | | $ 187,996.31 | | | | |
| | ( 275,104.70) | | | | | 275,104.70 | | | | |
| | ( 412,186.80) | | | | | 412,186.80 | | | | |
| | ( 99,241.76) | | | | $ 99,241.76 | | | | | |
| | ( 37,464.60) | | $ 25.75 | | 37,438.85 | | | | | |
| | ( 211,080.04) | $ 13,967.21 | 55,505.81 | | 141,607.02 | | | | | |
| | ( 225,869.49) | | | | | 225,869.49 | | | | |
| | 69,559.52 | | | | | | | | $( 69,559.52) | |
| | 5,660.28 | | | | | | | | ( 5,660.28) | |
| | 11,814.46 | | | | | | | | ( 11,814.46) | |
| | 5,719.50 | | | | | | | | ( 5,719.50) | |
| | ( 8,402.43) | | | | | | | | 8,402.43 | |
| | ( 11,284.41) | | | | | | | | 11,284.41 | |
| | 51,002.29 | | | | | ( 51,003.29) | | | 1.00 | |
| | 38,992.16 | | | | | ( 38,992.16) | | | | |
| | ( 79,832.19) | | | | | | | | 79,832.19 | |
| | ( 2,227.40) | | | | | | | | 2,227.40 | |
| | ( 72,473.08) | | | | | | | | 72,473.08 | |
| | ( 429,707.12) | | | | | 429,707.12 | | | | |
| | 391,230.00 | | | | | ( 391,230.00) | | | | |
| | ( 12,576.26) | | | | | 12,576.26 | | | | |
| | ( 368,808.37) | | | | | 368,808.37 | | | | |
| | ( 263,977.16) | | | | | 263,977.16 | | | | |
| | ( 19,678.07) | | | | | | | | | $19,678.07 |
| | 109,282.63 | | | | | 248,281.03 | $(252,752.18) | $(104,811.48) | | |
| | ( 1,588.48) | | | | | 1,588.48 | | | | |
| | ( 1,076.34) | | | | 1,076.34 | | | | | |
| ,480,227.70 | 1,480,227.70 | | | | | | | | (1,480,227.70) | |
| 762,592.06) | ( 762,592.06) | | 762,592.06 | | | | | | | |
| 21,126.61) | ( 21,126.61) | 21,126.61 | | | | | | | | |
| 3,106.27) | ( 3,106.27) | | | | | 3,106.27 | | | | |
| 901.50) | ( 901.50) | | 901.50 | | | | | | | |
| 584,382.23) | ( 584,382.23) | 584,832.23 | | | | | | | | |
| 169,642.68) | ( 169,642.68) | 169,642.68 | | | | | | | | |
| 16.65) | ( 16.65) | | | $16.65 | | | | | | |

## 9. TESTIMONY OF COMMISSION WITNESS CHARLES W. SMITH AS TO PRINCIPLES OF ACCOUNTING, TUESDAY, APRIL 22, 1941, RECORD PAGES 2702 TO 2823.

—2702—

Whereupon, CHARLES W. SMITH, a witness called on behalf of the Commission, having first been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION by Mr. Springer.

Q. Will you state your full name and position, please? A. Charles W. Smith, I am chief of the Bureau of Accounts, Finance and Rates, of the Federal Power Commission.

Q. Will you please state your qualifications? A. I have a B. S. degree in finance and business administration, and, also, an L.L.B. degree. I am a certified public accountant of North Carolina and of Maryland, the first having been obtained about eighteen years ago. I am a past president of the Maryland Association of Certified Public Accountants and a member of the American Institute of Accountants, the American Accounting Association, the American Economic Association, the American Bar Association, and an honorary member of Delta Sigma Pi, an international commerce fraternity, and Beta Alpha Psi, a national accounting fraternity. I am also a member of the Committee on Statistics and Accounts and the Committee on Depreciation of the National Association of Railroad and Utilities Commissioners. I have been admitted to bar of the Court of Appeals of Maryland and the Supreme Court of the United States.

—2703—

For nine years, beginning in 1920, I was an auditor in the Income Tax Unit of the U. S. Treasury Department and, in this capacity, I audited the income tax returns and

books and records of practically every type of business corporation, including public utilities. On June 1, 1929, as the result of obtaining the highest mark in a competitive examination, I became the Chief Auditor of the Public Service Commission of Maryland, remaining in that position for seven years. I joined the staff of the Federal Power Commission on July 1, 1936, in substantially my present capacity.

For ten years I taught accounting in evening schools in Baltimore, Maryland, including eight years at Johns Hopkins University where I gave the course in accounting systems and for two years the course in cost accounting. These courses were for both day and evening students.

I have written several articles on accounting and economic subjects, including a text on accounting systems for my classes at Johns Hopkins. I have delivered more than fifty lectures, including two radio addresses, on accounting, financial and economic subjects.

While with the Maryland Commission, I did a good deal of work as consultant in accounting, taxation and finance in my spare time. On one occasion I obtained leave of absence to do some consulting work for the Tennessee Valley Authority and on two other occasions I was granted leave to act as consulting accountant to the Federal Power



Commission. On these latter two occasions I supervised the drafting of the Uniform System of Accounts which the Commission has prescribed for public utilities.

While in the employ of the Public Service Commission of Maryland, I had charge of all accounting, auditing and financial matters which were under the jurisdiction of that body. This included the making of the usual accounting investigations for all regulatory purposes, all studies relating to the issuance of securities, financial structures, rate of return, et cetera.

In my present position, I have charge of four divisions of the Federal Power Commission, namely, the Division of

Accounts, Division of Finance and Statistics, Division of Rates and Research, and the Division of Original Cost. Altogether, I have testified in more than thirty public utility cases.

Mr. Springer: Mr. Examiner, when Mr. Smith testifies on depreciation principles later, I would like to have him add to his qualifications.

Now, may I have marked for identification as Exhibit No. 57 and Exhibit No. 57-A, volumes I and II, entitled "Original Cost of Gas Plant as at December 31, 1938," referring to the Hope Natural Gas Company?

Trial Examiner: They may be so marked.

(The documents referred to were marked, respectively, as Exhibit No. 57 and Exhibit No. 57-A for identification.)

By Mr. Springer:

—2705—

Q. Mr. Smith, referring to the exhibits marked for identification as 57 and 57-A, are they the result of an accounting investigation undertaken in conformance with the original order of investigation in the Hope Natural Gas rate case? A. That is true.

Q. Was this investigation conducted under your general supervision and direction? A. It was.

Q. Will you explain how this supervision and direction were exercised? A. I exercised supervision directly by discussing with each examiner in charge the principles and the methods on the problem involved in the investigation. These discussions took place in the offices of the company, and in my office in Washington.

Supervision was also exercised indirectly through Mr. Baker, the chief accountant of the Commission, and Mr. Jackson, formerly assistant chief accountant of the Commission.

I discussed with these gentlemen all of the problems and methods involved in the investigation before they

visited the offices of the company to review the work, and had conferences with them upon their return.

Q. What were your instructions as to the determination of the original cost of the properties of the Hope Natu-

—2706—

ral Gas Company? A. The staff was instructed to determine original costs in accordance with the system of accounts prescribed by the Commission for public utilities and licensees.

At the time the investigation began, the Commission had not prescribed a system of accounts for natural gas companies.

I anticipated however that when the system of accounts for natural gas companies was issued, the original cost provisions would be the same as in the system for the electric utilities, and I was right in that anticipation.

Q. Is the system of accounts prescribed by the Federal Power Commission for natural gas companies substantially the same as the system of accounts adopted by the National Association of Railroad and Utilities Commissioners? A. Yes, it is almost word for word the same.

Q. And you have stated that some of the provisions are the same for the system of accounts prescribed for public utilities and licensees? A. Many of the provisions are the same, particularly the provisions relating to the determination of original costs.

Q. Are the provisions relating to original costs the same as those in the system adopted by the National Association of Railroad and Utilities Commissioners for electric utilities?

Mr. Cockley: I object to that. What has that got to do with what we are concerned with here?

—2707—

Mr. Springer: It shows the uniformity of accounting systems for all types of utilities. It is very proper, Mr. Examiner.

Trial Examiner: The objection is overruled.

The Witness: They are the same.

By Mr. Springer:

Q. Are such accounting systems in widespread use today? A. They are. The system of accounts for electric utilities is effective for about 95 percent of the industry, the electric industry, measured by revenues or plant.

The system has been adopted by some 29 commissions.

The system of accounts for gas utilities has been adopted by about 18 commissions.

Of course certain commissions have made some changes, primarily to conform to local conditions.

Q. Will you explain how the system of accounts for natural gas companies prescribed by the Federal Power Commission was compiled, showing particularly how uniformity was obtained by the national associations and the Federal Power Commission?

Mr. Cockley: I object to that. He is now going into how the uniform system of accounts was adopted. Are we going to try out the question of whether or not it was properly adopted, or what changes were made in going through its adoption, and so on?

—2708—

Mr. Springer: This is still the original objective of showing the uniformity and consistency in accounting principles in most of the systems of accounting in the United States.

Mr. Cockley: I submit it hasn't a thing to do with this present rate case. I haven't any objection to this witness testifying as to how much of this exhibit he accepts responsibility for, and what principles he instructed his subordinates to follow in carrying it out—I assume that that is his purpose—but to go into the history of the theory of accounting in the United States on these uniform systems of accounts, and how the Federal Power Commission has

prescribed for electric utilities or other utilities, or the National Association of Railroad and Utilities Commissioners has prescribed for other utilities, hasn't a thing to do with the simple problem we have got here.

Mr. Springer: It happens to be vital to the problem we have here. These are principles of accounting. Mr. Smith is taking the logical preliminary step of testifying on principles of accounting, and then he will show that they were employed in the preparation of this accounting exhibit.

Mr. Cockley: That isn't what your question asked, as I understand.

Trial Examiner: Read the question, please.

(The pending question was read by the reporter.)

Mr. Cockley: He wants to know how it was compiled.

—2709—

Trial Examiner: Well, it seems to me that it is somewhat remote, but it is perhaps preliminary to questions which will bring it up closer to our subject.

Mr. Springer: Precisely.

Trial Examiner: The objection is overruled.

Mr. Cockley: Note an exception.

The Witness: The Federal Power Commission retained me in 1935 to work with the Committee on Statistics and Accounts of the National Association of Railroad and Utilities Commissioners in drafting a new system of accounts for electric utilities.

As soon as that system was prepared, a system was prepared for gas utilities. I did very little work on the latter system at that time. The two systems were adopted by the National Association and the electric system was adopted by the Federal Power Commission. When the Natural Gas Act was passed, the Federal Power Commission instructed me to look towards the drafting of a system of accounts for natural gas companies.

I worked with the Committee on Statistics and Accounts of the National Association in compiling certain revisions of the system which had been adopted by that organization in 1936; when the revisions were agreed upon, they were adopted by the National Association, and the resulting system was adopted by the Federal Power Commission.

—2710—

It was in this manner that uniformity in the system of accounts, particularly uniformity in regard to provisions relating to original cost, has been obtained.

By Mr. Springer:

Q. Do you know of any other system of accounts promulgated by regulatory bodies which requires the keeping of plant accounts in accordance with what is known as the original cost principles?

Mr. Cockley: I object to that. There is no issue here at all about how a company should keep its plant account. This isn't an accounting case, but a rate case, and it is wholly immaterial.

Mr. Springer: This is in the category of the other preliminary questions, to show uniformity and consistency; and consistent with your former ruling I think you will have to rule in my favor this time.

Mr. Cockley: An earlier error doesn't excuse a later one, if I may suggest. (Laughter.)

Trial Examiner: Well, it seems to me that the Commission is raising some question here which will make this point directly in issue. The objection is overruled.

Mr. Cockley: Note an exception.

The Witness: The Federal Communications Commission in 1935 prescribed a system of accounts for telephone carriers in which the original cost principle is set forth.

—2711—

The system of accounts prescribed by the Interstate Commerce Commission for pipeline companies in 1935 likewise provides for original cost accounting, although the term "original cost" is not used. The language, in other words, is not the same, but the substance is there.

And the system of accounts adopted within the last five years by the National Association of Railroad and Utilities Commissioners for water companies, likewise provides for the keeping of accounts according to the original cost doctrine.

By Mr. Springer:

Q. How is original cost defined by the Federal Power Commission system of accounts? A. Original cost, as applied to gas plants, means the cost of such property to the person first devoting it to public service.

Q. Will you explain the general underlying principles of the original cost provisions of the uniform system of accounts for natural gas companies? A. Specifically, the original cost provisions relate to acquisitions of operating units or systems. As public utility operating units or systems are acquired, some means must be found for distributing the purchase price to the various accounts.

The purchase price usually contemplates the earning power of assets, the fact that customers are attached, the

—2712—

fact that properties acquired represent a profitable business, and other factors.

One of the most difficult problems of accounting involves the accounting for acquisitions of going businesses.

When one public utility acquires the properties of another, it is necessary to distribute the purchase price in some manner to the various accounts, as I have just indicated.

Heretofore, distributions often have not been made, and the purchase price has been continued as a lump sum in one account, without ever afterward changing it.

In a great many cases, the distributions were most unsatisfactory.

Accordingly, the system of accounts attempted to solve this problem by requiring the original cost of the acquired properties to be set up in the various plant accounts, and any differences between the original cost figure and the actual cost to the acquiring company, to be entered in a special account called Account 100.5—Acquisition Adjustments Account.

Mr. Cockley: Mr. Smith, pardon me, I don't like to interrupt you, and I apologize for doing it, but if you will read your answers a little slower, we will be able to understand them better, because you appreciate we have not had a copy of the answers from which you are reading.

The Witness: Mr. Cockley, I have just a few answers which I will read. Most of them will be delivered without



reading. The ones where I thought I might become involved, or go off on a tangent, I reduced to writing, but I will try to read those slowly.

Mr. Cockley: My point is that you were reading a little too rapidly to follow you.

The Witness: The original cost doctrine specifically relates to the acquisitions of operating units or systems.

By Mr. Springer:

Q. How are the costs of properties constructed by the accounting utility, accounted for, Mr. Smith? A. They are accounted for at cost to the utility according to an established plan of accounting. When these costs are accounted for by the utility according to a bona fide and acceptable accounting plan, and when the costs of operating units acquired are accounted for in accordance with the original cost principles, then we have the original cost of properties recorded in the various plant accounts.

Q. Well, is the original cost of the properties constructed by the Hope Natural Gas Company, the cost ac-

counted for in the past exclusive of errors in accounting? A. Yes, that is true. In other words, the cost of the company's own construction, as recorded on its books, except for accounting errors, is the proper original cost.

Q. Now, referring to the Commission's uniform system of accounts for natural gas companies, is there any

—2714—

authority under that system of accounts for a company like the Hope Company to re-account for its own construction in such a manner as to increase the amounts heretofore entered in the accounts, if the original entries were in accordance with accepted principles of accounting?

Mr. Cockley: I object to that. That exhibit speaks for itself. It is already an exhibit, as I understand it, in this case, and there is no occasion for asking the witness his construction of it; and it is wholly improper to do so unless some question arises about it.

Mr. Springer: Mr. Cockley, you prevailed with your objection to the admission in evidence of this document. It is not an exhibit.

But at the same time, we are talking about accounting principles and I am asking Mr. Smith a proper question in line with his development of the original cost principles.

Mr. Cockley: And the proper way to prove it is through the introduction of that exhibit in the case. If it now becomes relevant, whereas it wasn't before, the Examiner could admit it or not. But to have a witness testify that, taking this system of accounts—this is proper or that is proper, I submit is wholly improper.

—2715—

Mr. Springer: May I have marked for identification as Exhibit No. 58, a copy of the Federal Power Commission's uniform system of accounts prescribed for natural gas companies, effective January 1, 1940?

Trial Examiner: It may be so marked.

(The document referred to was marked as Exhibit No. 58 for identification.)

By Mr. Springer:

Q. Mr. Smith, I show you Exhibit No. 58 for identification. Is that the document you have just described? A. It is.

Q. Is that the system of accounts I referred to in my last question? A. It is.

Mr. Springer: I offer Exhibit No. 58 marked for identification, in evidence.

Mr. Cockley: There is no objection to the identification of this document, we admit what it is. I do object to it as wholly immaterial in this case, and I want to preserve that objection of record.

Mr. Springer: It happens to be the crux of the case, Mr. Trial Examiner.

Mr. Cockley: Well, somebody else than you will decid that, I am happy to say.

Trial Examiner: The objection is overruled. Exhibit

—2716—

No. 58 is admitted into evidence.

(Exhibit No. 58 received in evidence.)

Mr. Cockley: Note an exception.

Mr. Springer: Will you please read my original question to Mr. Smith?

(Whereupon, the reporter read the pending question.)

Mr. Cockley: That question I object to. The system of accounts is now in evidence and will speak for itself.

Trial Examiner: Well, it seems to me that the form of question is perhaps somewhat objectionable, but the substance of it is rather important and proper. The objection is overruled.

The Witness: The answer is no, and that has been my consistent interpretation of the system of accounts and the companion system, the one for electric utilities, since they

were adopted; and I might add that I am authorized by the Commission to issue interpretations over my own signature, and I have made many such interpretations.

By Mr. Springer:

Q. Will you please define reaccounting as distinguished from reclassification of accounts? A. Reclassification is a distribution of the amounts in the accounts—

Mr. Cockley: (interposing) I don't like to object all the time, but I want to object to this question. There is no



issue here at all about the method of reaccounting or reclassification, as I understand it; and may I have a general objection here to these general accounting questions that are not related specifically to the exhibits in this case, and then I will retire in peace and let him go ahead?

Trial Examiner: Yes, I think that would be proper.

Mr. Springer: I would like to have a statement then that all of the accounting principles are related and embodied in the proposed exhibit on original costs.

Trial Examiner: The general objection is overruled; you may have an exception.

By Mr. Springer:

Q. Will you please start again, Mr. Smith, on the distinction between reaccounting and reclassification? A. Reclassification is a redistribution of the amounts in the books of account. Reclassification deals particularly with what we know as real accounts, that is the balance sheet accounts.

The accounting system provides for a reclassification in that it provides that certain amounts recorded at one place in the balance sheet shall now be transferred to another account. Particularly is this true in respect to plant accounts. We have different plant accounts in which the amounts in the books are redistributed.

Reaccounting on the other hand goes not to the clas-

—2718—

sification so much as to the amounts themselves.

By reaccounting we mean going back to the time of the original transaction and restating that transaction so as to get a different cost, different plant cost, a different cost of some real account than appears in the books in respect to the transaction.

Q. Well, in consequence a reclassification does not change the total dollars in plant accounts, does it? A. That is correct.

Q. But a reaccounting may? A. Yes.

Q. Which is improper? A. It is improper, a reaccounting generally is improper. I want to make the reservation that it is always proper to correct pare accounting errors.

Q. Will you explain any provision in the system of accounts which prohibits the reaccounting which you have described? A. Gas plant instruction 2(b) deals with this matter, and the particular part of that instruction which is pertinent reads as follows:

> "It is likewise not intended that adjustments shall be made to record in gas plant accounts amounts previously charged to operating expenses in accordance with the uniform system of accounts in effect at the

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> time, and in accordance with the discretion of management as exercised under such uniform system of accounts."

Q. Will you please explain that provision? A. In other words, reaccounting does not conform to sound principles of accounting, and this provision was inserted in the system of accounts to make doubly sure that no one would construe the system of accounts as authority for such reaccounting.

Q. Suppose the cost of the company's own construction was entered in its accounts at a time when regulatory commissions had not prescribed systems of accounts, could the company under the system of accounts now in effect reaccount for items accounted for during this period? A. If your items were accounted for properly in the first instance, they could not be reaccounted for, in my opinion.

Q. Do you care to elaborate on that, Mr. Smith?

Mr. Cockley: I object to it. The witness has answered the question.

Trial Examiner: Objection sustained.

By Mr. Springer:

Q. That is, the determination of cost is one of the chief purposes of accounting? A. The determination of cost is one, if not the chief, purpose of accounting, but many kinds



of cost are involved in accounting.

We have costs of plant and we have costs of operations. [redacted] the most difficult accounting problems is the [redacted] costs to a particular operating period such as [redacted]

[redacted]re is no precise answer in regard to the latter problem. Considerable judgment must be used in allocating costs to a particular period of time, and in this field considerable discretion is allowed under the accepted principles of accounting.

Q. Is it as difficult to determine the revenues for a period as it is to determine the costs? A. No, it is not. Ordinarily, there is very little problem in ascertaining the revenues over a particular period, but where a company expands its business and it has betterments and improvements, the difficulty of determining the cost of operations, the cost of keeping up that business, and the cost of the additions and betterments, is sometimes pretty great. It is in this particular field that considerable discretion is allowed in the field of accounting.

—2721—

Q. Then it is difficult to draw the line of demarcation between the cost of the additions and maintenance expenses, I take it? A. Yes, it is difficult, and that is recognized by all accountants having any real experience in that particular field.

Q. In that particular field is it necessary to be consistent? A. It is necessary to be consistent; in fact, consistency in this respect is of particular importance. The principles followed by a company should be consistently applied from year to year. Changes, of course, are permitted, but in public utility accounting, at least, they should be adopted for the future and properly explained.

The absence of consistency in the application of principles may lead to most inequitable results. In fact, failure to be consistent in matters of accounting may lead to distortion and manipulation.

It would be an easy matter to manipulate a financial statement by merely being inconsistent in the treatment of important items from year to year.

This view is so widely held that practically all certificates of public accountants to financial statements now contain a positive assertion with reference to the principles of consistency. The certificate, sometimes called the short

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form of report, recently approved by the American Institute of Accountants in connection with statements to the Securities and Exchange Commission, reads in part as follows:

> "In our opinion, the accompanying balance sheet and related statements of income and surplus present fairly the position of the XYZ Company at February 28, 1941, and the results of its operations for the fiscal year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year."

The emphasis on consistency is apparent.

To illustrate that point, if well drilling costs were charged to expense during the years large profits were realized, and if they were capitalized during poor years, distorted statements would be reflected and manipulations consciously or unconsciously practiced.

Such statements could not help but be misleading. Hence the importance of the principle of consistence in accounting.

Q. Now referring to the Federal Power Commission System of Accounts for Natural Gas Companies again, Mr. Smith, do variations exist in accounting under that system of accounts? A. They do.

Q. Will you explain some of those variations? A. Some companies capitalize no general and administrative expenditures at all, whereas other companies capitalize as much as possible under accepted accounting principles.

—2723—

Some utilities add all the interest possible to plant costs, whereas others contend that if they do not pay interest, no interest should be charged to plant assets.

Some companies try to determine the exact time of each laborer, of each mechanic, spent on each job, and charge the specific labor cost to that job; whereas, others use an average rate, such average being based in some instances upon a crew of workmen, and in some instances for an entire group or a division, and in some instances yearly averages of pay, with proper adjustment allowances for sick leave and vacation, are reported.

Sometimes the labor cost is associated with a machine, such as a steam shovel, and a machine hour rate includes the labor rate.

Many variations likewise exist in regard to accounting for materials.

Except for large identifiable units, many materials must necessarily go into plant, and into operating expenses at average cost of one kind or another.

Thus a stock of pipe of a certain size may have been acquired at various unit costs. When the pipe is used for maintenance purposes, and for the purpose of making additions and betterments, some assumption, such as the "first in—first out," or some average cost, is employed, and very frequently this average cost gives recognition to re-used

—2724—

materials on which the original cost, the actual specific original cost, cannot be found.

There is no certainty that the particular piece of pipe that was charged to plant was charged at the actual cost of that particular piece of pipe. There is no reason, in fact, why this should be so.

Many practices regarding the replacement of property have existed in the past, and the practices today are not altogether uniform.

A study of the reports of American Railroads to their stockholders during the last century, will disclose many interesting illustrations of the difficulties of determining the difference between what should be charged to maintenance and what should be charged to plant.

The area of choice in maintenance accounting has been somewhat restricted under our system of accounts by the prescribing of a list of retirement units of property, but even under that list, variations still exist.

Thus, while there are broad principles of accounting, variations exist between these principles. No one can say that one particular variation is absolutely correct, and another absolutely wrong. No one can say, for instance, that only one method of accounting for labor costs is proper. Many methods of accounting for labor costs are in vogue, and the question is not so much what is right or

—2725—

wrong, but rather what is the better practice in a particular case.

This statement is likewise true as to material costs and it is even more true as to accounting for overheads.

In accounting for overheads, there is no one best method of distributing the amount. The method must necessarily be somewhat arbitrary. Certified public accountants do not hesitate to certify statements which do not conform to what they deem might be the best method. The same firm of accountants, in fact, frequently certifies to statements of different companies, employing different methods such as I have just outlined, and as far as I can see, they are right in both instances.

Q. Mr. Smith, assuming that a transaction is accounted for under one of the permissible variations, should it later be re-accounted for?

Mr. Cockley: I object to that. There is no evidence of any such thing in this case, nor will there be.

Mr. Springer: This is a question directed to the principles of accounting.

Trial Examiner: The objection is overruled.

Mr. Cockley: Exception.

The Witness: Once a transaction is accounted for by consideration of the entire setting at the time of the transaction, and has been accounted for under one of the alternatives of accounting principles, it should not be changed



at a later date, particularly when the change is brought about merely because someone thinks a better answer could be obtained. If the accounting in the original instance conformed to sound principles, it should remain accounted for in that fashion, and that is especially true of businesses such as public utilities, in which there is a deep public interest.

Trial Examiner: The hearing is recessed, to reconvene at 2 o'clock.

(Whereupon, at 12:40 o'clock p. m., a recess was taken until 2 o'clock p. m., of the same day.)

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Afternoon Session.

The Trial Examiner: Gentlemen, the hearing will now be resumed.

Mr. Cockley: Before we proceed with the examination of this witness, Mr. Examiner, I would like to direct attention to the situation that is causing us considerable delay in the preparation of this case.

One of the principal exhibits that has been furnished us, and one that will soon be offered in evidence, if not the next, after these original cost exhibits are out of the way, is an exhibit that was prepared by Mr. French, of the Commission's staff, showing estimated lives of various classes of properties, which is a fundamental exhibit on which the depreciation determination is to be made.

We advised Mr. Springer on April 1st, when we received that exhibit, that we would have to see Mr. French's working papers to see what he had done, because the exhibit itself does not disclose that fact. We were told that he would not be available the coming week but would be on April 14th. On that date a couple of our men did interview Mr. French and asked for copies of various working papers that were necessary in order to understand what he had done. He insisted upon having copies of those prepared himself. They were not delivered to us until Saturday night, April 19th, after we got down here.

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Then, it developed this morning on the pipe accounts that we had no working papers on the other accounts, and that the papers on the pipe accounts lacked some key information that was necessary to a complete understanding of them.

We are now told that other work papers absolutely essential to any preparation of any examination of this exhibit will not be ready until Wednesday or Thursday of this week.

It is obvious, of course, that we can not examine them and be prepared to cross examine immediately upon their production. I would like to call that to the attention of the Commission and the attention of counsel to see if we can not have some arrangement by which we will get the work papers within a reasonable time so that we can prepare for cross examination.

Mr. Springer: We endeavor to accommodate counsel in each case. Mr. French was on a field assignment, which prevented our having access to his work papers to be reproduced for the convenience of the company men. But we will continue to cooperate with them to the best of our ability.

Mr. French was sent to New York the first part of this week. That is the reason for the delay in connection with the additional work papers that Mr. Cockley men-



tioned. Of course, we will furnish them. They are surely entitled to them. It is just a matter of a man working concurrently on more than one case; and he can not be at the Washington office at all times.

The Trial Examiner: Does he have to be here?

Mr. Springer: Yes, sir. They are his working papers. I think it is necessary when experts examine the work papers of other experts that the man who employed them as a foundation for an exhibit should be present. That is a matter of professional courtesy, as I understand it.

The Trial Examiner: I understood the work papers were being reproduced to be delivered to the company.

Mr. Springer: That is correct. The matter of the time required for reproducing the work papers I believe is the explanation of the delay.

We will continue to cooperate as much as we can.

The Trial Examiner: What I am trying to find out is why the work papers were not available at the time the exhibit was served. It seems to me that Mr. French must

have known that the work papers would be required and arrangements might have been made to make them available.

Mr. Springer: That is correct. And arrangements were made when he returned from the field on April 14th and working papers were made available to representatives of the company who were present. And they have accom-

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plished a certain amount of the objective undertaken at that time. And when Mr. French returns tomorrow we will do our best to give them rapid service on any other working papers copies of which they desire to have.

The Trial Examiner: You may proceed with the examination of the witness.

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Charles W. Smith resumed the witness stand, and having been previously sworn, testified on behalf of the Commission as follows:

Direct Examination by Mr. Springer (resumed).

Q. Mr. Smith, do you have in mind the last question I asked you before the recess? A. I do not have the answer to it, but I do recall answering the last question fully.

Q. Mr. Smith, if a transaction is accounted for under one of the permissible variations, should it later be re-accounted for? A. That was the last question that was answered.

Q. Your answer was that it should not be re-accounted for, as I remember it. Does your answer imply that accounting errors should not be corrected? A. No, sir. Accounting errors should be corrected as soon as they are discovered. However, a distinction must be made between an accounting error and a correction of an accounting error

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and re-accounting.

Accounting errors represent mathematical errors errors in posting and entries of transactions which were not in accordance with the principles of accounting. Re accounting is the restatement of the amounts which were entered properly in the first place to conform to some different condition.

To repeat, accounting errors should be corrected as soon as they are discovered.

Q. What is your definition of accounting errors? A. My definition of an accounting error is an entry which is an error in posting, a mechanical error, or an entry which did not conform to sound principles and practices of accounting.

Q. Would unrecorded retirements be an example of an accounting error? A. Yes, it would be. Where an item of property is in fact retired without any replacement having been made and an entry to record the retirement is not made on the books, that is an accounting error, known as an error of omission.

Q. Mr. Smith, it is sometimes said that, for the purposes of a rate case, we must compute the maximum cost of plant now in existence, regardless of how such costs were originally accounted for. This may mean that general



administrative expenditures which were never capitalized should now be restated and included in plant and that items previously charged to maintenance should now be capitalized. In fact, statements of cost conforming to this principle have been filed as exhibits in this case. In your opinion, is it necessary or is it proper to re-account for transactions in order to get the maximum costs which I have just described? A. My answer is no.

Q. Then, you do not agree with the statement I have just made, that for the purpose of accounting and for the purpose of a rate case, you must follow the principle of getting the maximum costs of the property regardless of

how such property was originally accounted for? A. No, most positively I do not agree.

Q. Will you please give an explanation of the reasons for your answer? A. Accounting does not deal with plant accounts alone. It is most important to recognize this fact. Accounting does not, in fact, emphasize particularly plant accounts. Expense accounting is just as important as plant accounting. It is just as appropriate to get all possible costs in the expense accounts as it is to get all possible costs in the plant accounts. All the phases of a transaction must



be analyzed at the time of the transaction in order to determine upon the correct entries. Plant phases and operating phases must both be considered. The answer must give proper weight to all factors. If we follow blindly the principle that all possible costs must now be assigned to plant, we fail to visualize the accounting process in all its entirety. We then make a fetish of plant costs. We forget that in determining upon an entry, many more things than the cost of additions and betterments are involved in accounting and in the running of a business. To repeat, all phases of the transaction must be studied and to concentrate on one phase only, that phase being how much can possibly be charged to plant accounts, warps the principles of accounting. Such false emphasis gives no heed to the cost of operating and maintaining the plant. It follows blindly an abstraction in a practical field of endeavor.

Q. Will you show how your reasoning applies in the case of general, administrative expense? A. Our System of Accounts permits a reasonable amount of the salaries of officers, general office clerks, and other general and administrative expenses, to be charged to plant accounts. I might note that the System of Accounts of the Interstate Commerce Commission does not permit such items to be allocated or prorated to plant accounts. Such expenditures, however, may, under our System of Accounts, be

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charged in toto to expense or a reasonable amount may b prorated to plant. The expenditures, of course, cannot b identified with any particular plant item and at best w can merely find a scheme of allocation, or proration, whic will be deemed satisfactory. There are many variation in practice in accounting for the general and administra tive expenditures which I have just described. It is no unnatural that this would be so because such expenditure are associated with all phases of the business, operations maintenance, additions, betterments, the payment of divi dends, interest, etc. There is no such thing as a one an only rule to follow in accounting for these expenditures My own personal view is that the better practice is t charge such items to expense, except the specific, incre mental costs which are incurred in connection with con struction and these should be capitalized.

My reason for this view is that a utility is in busines primarily to sell service or a commodity and not for th purpose of constructing additions and betterments, whic are only incidental to the former. General and administra tive expenses do not, in fact, fluctuate proportionatel with construction and they should not be made to do s arbitrarily by some method of accounting.

If, to repeat, a utility determines that these items ar expenses, I would recommend that the amounts be treate

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as expenses. If a utility charges a reasonable amount t construction, I would make no change for such accountin is satisfactory. When, however, such items are first charge to expense, as being a part of the cost of operating the bus ness and then they are restated in plant, under the theor that the maximum cost of all plant items now in existen must be included in the plant accounts regardless of pa accounting, a serious offense, I believe, is committed. Suc a practice, to repeat, would emphasize only one phase

accounting, namely, plant accounting. It would represent clearly a one-way street. It would treat plant costs as the end and purpose of accounting, and of business. The expenses I have mentioned are in reality joint costs and, as to joint costs, we all know that precise cost determinations are not possible of achievement. Where a reasonable and generally satisfactory answer has been obtained, it should not thereafter be vitiated by changing the philosophy of accounting so as to forget the entire setting of a transaction at the time of its occurrence and now aim at the highest plant costs obtainable under any principle.

Q. Will you please explain your answer from the viewpoint of maintenance accounting? A. I have already pointed out that there is no sharp line of demarcation be-



tween the cost of adding to a plant and the cost of maintaining it. Before our recent system of accounts for natural gas companies was adopted, much more discretion was allowed in the field of maintenance accounting than is now permitted. Many replacement items formerly chargeable to the maintenance accounts must now be charged to plant and the cost of the old items removed. It is still the practice of railroads, for instance, to charge the cost of numerous replacements to expense. We have tried to obtain more uniformity in the field of maintenance accounting. Toward this end, the Commission has prescribed a list of what is termed "retirement units of property" which is required to be adhered to, with some slight exception, by natural gas companies. This list shows the items which, when replaced, must be treated as plant retirements and plant additions. If two lengths of gas mains, for instance, are replaced, the cost of the old mains must be taken out of the plant accounts and the cost of the new added thereto. If a single length is retired, plant accounts are not disturbed, but the cost of the new length is charged to maintenance.

The exception I spoke of a moment ago is that natural gas companies may refine the retirement list—may have more retirement units, in other words—but they cannot consolidate them. Again we have not established a principle of pure accounting science in drafting the list of re-

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tirement units. Rather we have been somewhat arbitrary in order to obtain better results and, in particular, more uniform results. In compiling the list of retirement units, representatives of the industry participated in the discussions. All such representatives were aware of the fact that we were trying to determine upon some good workable rule in the interest of uniformity, rather than to announce a new principle of accounting.

It cannot be said that the old practices of natural gas companies in regard to maintenance accounting are wrong and that the new methods are absolutely right; rather the new methods were designed to obtain better results and not to correct something which was absolutely wrong. To hold otherwise would be to hold railroad accounting of today to be wrong. When we follow the principle of obtaining all possible costs of existing plant regardless of how the costs were accounted for previously, we forget, in fact we close our eyes to, maintenance practices. A new cost is then assigned to each existing item of property. If a railroad tie or a piece of iron pipe represented a replacement which was charged to maintenance expense, its cost is now included in the plant accounts. Under such a one-way scheme, accounting cannot function unless we make every conceivable expenditure associated with plant a unit of property and require it to be charged to plant. This

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would be a new kind of accounting. It would emphasize plant costs to the exclusion, or almost the exclusion, of operating costs. Conceivably under it, every time we would paint a structure we would have a new cost of the struc-

ture. Every time we replaced a tire or a tube or a brake lining, we would have a new cost for the automobile. This would be most unfortunate, in my opinion.

Q. Mr. Smith, are deferred debits and deferred charges synonymous in your terminology? A. They are frequently used synonymously. I might add that there may be a difference. I will have to know the connection in which you use the words in order to give you a technical answer.

Q. Sometimes, Mr. Smith, it is said that plant assets are deferred charges. Is that true? A. Yes; that is true. In the broad sense the cost of plant assets represents a deferred charge. You buy a piece of equipment, an automobile today, and it is capitalized and it is charged off during an operating period or over operating periods. In other words, its cost is deferred in part to the revenues of the future. In a sense, all plant assets are deferred charges.

Q. Is it easy to determine how much of such deferred charges is a proper expense of a given period? A. No; it is not. It is rather difficult to determine how much of



the deferred charge representing large plant assets should be charged to a given operating period. A great deal of judgment must be exercised in making that determination. And that is one reason why business men, who are naturally conservative, are reluctant to add too much to deferred charges and postpone too much to the future. Generally speaking, in case of doubt, business men and accountants generally prefer to charge an item to expense today rather than defer it over the future. That is, naturally, conservatism, and it represents good, sound practice, in my opinion.

Q. In Exhibit No. 20 the company shows the addition to the book cost of plant of about $17,000,000, under the theory that that amount must be added to book figures to obtain full and complete cost of plant in existence as of the end of 1938. Did you discuss these items with the staff and did you agree as to how such items should be treated?

A. We did discuss that. I discussed the items with the staff, and we are agreed as to their treatment. In fact, there was no disagreement on the part of any staff member.

Q. One of the adjustments proposed by the company in the exhibit mentioned related to overheads. Did you instruct the staff to add these overheads to the recorded

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cost of plant? A. I instructed the staff not to add the recorded expense items to the cost of plant.

Q. Why?

Mr. Cockley: I object to the long detailed reasons as to why it was done. He said what he did. Isn't that what we are interested in?

Mr. Springer: We are interested in this principle of accounting.

Mr. Cockley: If he thinks what he did needs some defense, yes. But it seems to me that it is a complete and perfect answer when he says "I instructed the staff to do so and so."

Mr. Springer: I thought it would be enlightening to have his reasons on this principle of accounting. We are on a vital point in this case, and he has already testified that he is responsible for the interpretation of the system of accounts for this Commission; and he is a most eminent authority on it.

Mr. Cockley: The accounting lecture that we have had so far was very interesting; but I can not see that very much of it has anything to do with Exhibit No. 57, except that it is apparent that Mr. Smith instructed the staff what to do with certain items.

Mr. Springer: I think it is important to have his rea-

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sons and why he gave such instructions.

The Trial Examiner: The objection is overruled.

Mr. Cockley: An exception, please.

The Witness: The company did not charge general and administrative overheads to the plant accounts at the time the original entries were made. This was its consistent practice. The practice of the company was not an unusual one at all, but I believe it conformed to the practice of the majority of natural gas companies. It conformed to sound accounting of the time and sound practices of today, in my opinion. I know, for instance, that many public utility companies do not include such overhead expenditures as a part of their plant cost at the present time. The items in the instant case have been properly charged to expense and, in my opinion, they should remain there. It would be wrong, therefore, to include such items in plant now and start depreciating them and perhaps allow a return on them. Such a practice would be bad accounting and, in my opinion, bad regulation as well. The addition of the overheads mentioned to the plant accounts would clearly not represent the correction of an accounting error. It would merely be substituting one alternative method of accounting for another which was used in the regular course of business and which was reflected in the financial statements prepared by the company, in its income tax returns, etc.

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The practice there conformed to sound practices of the time and, I think, sound practices as of today. I think it would be a write-up of accounts to permit those items to be included in plant today, either for accounting purposes or for rate making purposes.

By Mr. Springer:

Q. On Exhibit No. 20, about $11,000,000 were added to the book figures for drilling costs which were originally charged to expense and not capitalized. What was your instruction to the staff regarding those items? A. I instructed the staff not to add that amount to the plant cost.

Q. Why did you give that instruction?

Mr. Cockley: May I have an objection to all of these why's? I take it that I may.

The Trial Examiner: Yes. The objection is overruled.

Mr. Cockley: An exception, please.

The Witness: From the inception of the company to the end of 1922, the company charged such expenditures to operations, that is, to expense. The practice conformed to the practice of natural gas companies at the time. Inasmuch as it conformed to good practice, I believe it would be wrong to permit the restatement of such items, to include them in plant accounts today.

There can be no doubt, in my opinion, but that it was

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the widespread practice and good practice at the time to charge such expenditures to operations. And I say that not only for natural gas companies, but all companies in other extractive industries as well.

By Mr. Springer:

Q. Then, it follows that the practice in not capitalizing the costs at that time was not an accounting error? A. That is correct.

Q. Will you state why you think the charging of such items in that manner conformed to good practice at that time? A. Our study of the subject shows that the practice was widespread. In fact, I understand the practice still continues in the case of certain oil companies. The practice of charging intangible costs to expense was strongly advocated by the natural gas industry. The practice was changed, in my opinion, only because a change was required by regulatory commissions. I happened to be in the Income Tax Unit of the Internal Revenue Bureau when the question as to proper treatment of the so-called drilling costs—

Mr. Cockley: I object to this as wholly aside from anything that we have here now. Now we are going into

the personal experiences that he had in the Bureau of Internal Revenue. That is not responsive to the question.

The Trial Examiner: Well, he is testifying as to ac-

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counting principles and practices. I presume he intends to develop something relating to the practices.

The objection is overruled.

Mr. Cockley: An exception, please.

The Witness: I was in the Income Tax Bureau when this same question was presented. I had to make decisions on the subject at that time. The Income Tax Bureau ruled that such costs could either be capitalized or charged to expense at the election of the utility, provided the practice first established was consistently applied. A change after a practice had been established could not be made.

This is still a part of the Income Tax Regulations and will be found in Section 19.23(m)-16 (1) of Regulations 103.

I have made inquiry and find that most natural gas companies today continue the practice of charging well drilling expenditures to expense for income tax purposes. That was not something peculiar to the income tax law, because the income tax law of 1918 provided, among other things, in general language, that the books of accounts should be used where they properly reflected income.

When a system of accounts for natural gas companies was under consideration in 1919 by the Public Service Commission of Pennsylvania, the Natural Gas Association of America strongly urged that the expenditures mentioned be treated as operating expenses. They argued that such

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items constituted expenses. The Commission held, however, that the costs should be capitalized. This is a better practice from the regulatory viewpoint for many reasons. It is the practice required by our present system of

accounts. It, too, is more in line with present theories of accounting.

The decision of the Pennsylvania Commission was the first which to my knowledge required the capitalization of intangible production expenses. Other commissions followed the Pennsylvania Commission. I fully believe that regulatory commissions are responsible for the change from treating such items as operating expenses, to the requirement that they be capitalized. Some oil companies, as I have pointed out, still follow the old practice.

In general, intangible production costs were deemed to have been incurred to keep the company in business. Extractive businesses are often looked upon as single ventures. Under this viewpoint it was held the chief purpose of drilling new wells was to keep the company going. It was believed unwise to defer such costs over a future period. This is not an unusual principle as far as the extractive industries are concerned. Quite generally, items are charged to expense in such industries when they would be charged to capital by other business enterprises.

I know from having audited a great many accounts



of mining companies, that many items normally capitalized in the manufacturing and commercial institutions are charged to expense by the extractive industries.

By Mr. Springer:

Q. Mr. Smith, I understand that the company, the Hope Natural Gas Company, for the years 1918 to 1922 charged off the cost of direct labor incurred in laying mains and similar labor in connection with compressor station construction and equipment installation. Is that true? A. I believe it is.

Q. What were your instructions in regard to those costs? A. I instructed the staff to include them in plant account.

Q. Why? A. First of all, the items were actually capitalized by the company in the first instance. After being capitalized they were arbitrarily written off at the end of the year in which capitalized. The company's practice did not conform to general practices or to accounting theory. Its practice, for this period, was an accounting error. I believe the practice was resorted to primarily to have the items allowed for income tax deductions, although I do not have any positive knowledge that this is true. In any event, I am of the opinion that an accounting principle was

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violated by charging off the capitalized items, therefore the amounts should be added to the plant accounts, as far as the general principles of accounting are concerned. I recognize, of course, that a different conclusion from what I have given may obtain for rate-making. It is possible that once a charge is made against customers in calculating rates, even though the charge were made in error, the same charge should not be exacted again. However, at this particular time, I am addressing myself to accounting principles and, as far as accounting principles are concerned, I believe it is proper to state the direct labor costs I have described as a part of the cost of plant.

Q. I understand, Mr. Smith, that the company in Exhibit No. 20 made certain adjustments to the book cost of plant so as to conform to an inventory of its property which it compiled as of the end of 1938. What were your instructions regarding these adjustments? A. I instructed the staff to accept the company's adjustments. The inventory adjustments represented in the main a correction for unrecorded retirements. In other words, the company's invento disclosed what we expected to be the fact—that a lot of property items had, in fact, been retired without a concomitant entry having been made in the books of account.

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In addition, however, there was disclosed many items which did not appear in the books. We accepted those items because we believed in large measure that they offset some of the items which were retired.

The problem of identification where an inventory is taken is enormous. Very frequently items are considered to be unrecorded retirements when, in fact, another item taking its place is added. The difficulty of identifying the units of property with the actual dollars is a great one. So we have accepted the inventory adjustments which, as I have indicated, in the main result in a correction for unrecorded retirements.

Q. Are there any other adjustments to the book figures which you wish to discuss? A. There were many adjustments made to the book figures, but most of these do not rest upon the fundamental principle that I am testifying to at this time.

Q. You have testified as to the original cost as contemplated by the Commission's Uniform System of Accounts for Natural Gas Companies. Does that cost, in your opinion, have any validity for any purpose other than matters of accounting? A. In my opinion, such costs should be considered the original costs for rate making and for all other purposes of regulation. In fact, I think they are

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the only valid costs for that purpose.

I make one exception to the latter statement, an exception which I have noted before, and that is where an item has been charged to expense in error, an item which should be charged to plant, there would still be considerable justification for the Commission's treating that item as an expense. And I think as far as costs are concerned, with the exception I have mentioned, costs computed in accordance with the Commission's uniform system of accounts are the only valid costs.

Q. What do you mean by "valid costs"? A. Costs, to have any validity for regulatory purposes particularly, must be cost computed in accordance with a definite scheme of accounting. In other words, as I have previously testified, in determining cost of plant and in determining the cost of operations, all phases of the particular transaction should be considered before the accounting entries are determined upon. If this is done, the resulting plant costs are valid, but if the costs are included both in expense and then restated in plant, the plant costs are, in my opinion, invalid. It would be most unfortunate, most inequitable, to follow abstractions in this matter and not give consideration to actualities. Items which are expenses should re-

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main expenses; items which are plant costs should remain as such. There is no validity, to repeat, to plant costs which are determined by transferring thereto previously recorded operating expenses after the operating expenses have served their purpose. Only costs which square with the treatment of operating expenses have any integrity for rate-making purposes, in my opinion. In this connection, I would like to cite a very pertinent example.

Today we treat delay rentals as expenses. Now, under the principle of determining maximum or abstract costs, delay rentals should be charged to plant. Delay rentals can be identified directly with particular leases. These costs are incurred before production is obtained. They represent a cost of carrying the leases until drilling is completed. If we follow the cost principle blindly, delay rentals should be charged to plant as a cost of the leases. There can be no question concerning this statement, in my opinion. Yet we have knowledge of only one company in the United States which capitalizes delay rentals and I understand that that company is glad to cease the practice.

Delay rentals are treated as expense because it is not deemed wise for a natural gas company to capitalize such items and postpone indefinitely in the future the charging

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of them to expenses. In other words, there is an overwhelming consensus of opinion that delay rentals constitute a current expense which should not be capitalized in spite of all the finely spun theory to the contrary. Even witnesses for the company have not followed this fine theory, although it is no more tenuous than the theory supporting adjustments for well drilling costs, overheads, etc. It seems to me to be axiomatic that if delay rentals are treated as operating expenses today, they should never be re-accounted for in the future as plant costs.

The only valid costs, to repeat, would be those which give recognition to the original treatment of delay rentals. If delay rentals are currently charged as operating expenses and years later they are added to plant costs, I submit that plant costs will have no validity whatsoever. Valid plant costs, to reiterate, are only those which give full recognition to all phases of the accounting process—expense accounting as well as plant accounting.

Q. Mr. Smith, financial statements are made in the ordinary course of business by the management, are they not? A. Yes; they are constantly being used by management.

Q. And on those financial statements information the management make their decisions, do they not? A. Yes, indeed. As a matter of fact, I believe it was Stuart Chase who said that when a business gets so large that one man

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can't take care of all of its details, accounting takes over. Naturally, financial statements are relied upon by executives in making their decisions.

Q. While re-accounting may be proposed by the utility, can it go back and undo the transactions which the

company entered into and the decisions which it made as a result of the facts shown by such statements? A. No. It is easy enough to transfer figures; and it is easy, the easiest thing in the world, to put another figure in the plant account and make the contra entry somewhere else in the books; but the decision of the management on the facts shown by the financial statement in the past can not be changed.

To give an example, natural gas companies generally consider well drilling expenses as expense. Undoubtedly their decisions were based upon that concept, and undoubtedly the practice had a good deal to do with the rates, charges and revenues of the companies. We can not go back and restate those matters of substance; we can not go back and make new rate contracts. It is an easy matter to change the accounting, but the substance remains permanently fixed.

Q. Have you made many accounting investigations for the purpose of determining original cost? A. I have.

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Q. How many? A. I don't know, but I have made a good many.

Q. Have the principles testified to by you in this proceeding been applied in making those investigations? A. They have; and they have been consciously applied. Offhand I do not recall any more than two cases where I have restated the general administrative expenses. And yet I am familiar and was familiar at the time of making the investigation of many practices of accounting with regard to them. After studying such instances, if I deemed that they were accounted for under one of the alternative methods I made no change.

That applies with equal force as to the accounting for maintenance items. That makes me more than amazed when I find companies claiming that such items are now to be charged to plant accounts.

Q. The accounting principles to which you have now testified are applied and embodied in the original cost exhibit marked for identification as Exhibits 57 and 57-A, are they not? A. That is true.

Q. In the exhibits marked for identification as Nos. 57 and 57-A, is the cost on the company's books as adjusted by the Commission's accounting examiners synon-

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ymous with original costs as you have defined it and in accordance with the Commission's system of accounts? A. Yes, to the extent that it relates to property shown in the exhibit. In other words, I make one qualification. We did not go into the distribution property of the company. And except for that one variation, the original cost is correct.

I had better change that. The statement shows the original cost of the company's property, excluding the distribution property.

Q. Mr. Smith, I believe that Mr. Antonelli, who sponsored Exhibit No. 20 showing the claimed original cost of the company, said he based his study upon the West Virginia System of Accounts for Natural Gas Companies. Are you familiar with that portion of the record? A. Yes. I believe that is correct.

Q. Are the provisions of the West Virginia System of Accounts and the Federal Power Commission system of accounts for natural gas companies substantially the same? A. They are substantially the same. They were not word for word the same until November 29, 1940, when the West Virginia Commission amended its system. I happened to know about the amendment before it took place. I agreed therewith. The amendment does not change the principles at all.

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We have constantly interpreted our system of accounts to mean what the West Virginia Commission's system of accounts now reads with the amendment I just described.

Q. Then there is no difference between the West Virginia system and the Federal Power Commission system accounting principles and original cost principle to which you testified? A. Certainly not as to original cost.

Q. Mr. Smith, referring to the exhibit on original cost in two volumes, marked for identification as Exhibits 57 and 57-A, and written statements and supporting schedules in those two volumes, if appropriate questions were directed to you, would that be your direct testimony in this case? A. It would be my direct testimony in this case so far as principles are concerned. It must be remembered that we had as many as thirteen men on the assignment and, naturally, I could not check the details of the work of those thirteen men. As a matter of fact, I did not attempt to do so. The mechanics, the figures, the computations, etc., represent the work of others.

Q. Naturally. But your instructions on principles are embodied in this original cost exhibit? A. That is correct.

Mr. Springer: That is all the direct testimony of Mr.



Smith at this time.

Mr. Cockley: I am prepared to cross examine Mr. Smith, subject perhaps to some further cross examination if after his testimony is written up and we can see it, we desire to do so. But I understood from Mr. Springer that for the convenience of Mr. Smith he wanted to have him testify at this time on principles of depreciation.

Mr. Springer: That is entirely satisfactory.

Mr. Cockley: I have no objection to that, but I just wanted it understood before we did it that I should probably cross examine Mr. Smith on this so-called original cost exhibit and perhaps Mr. Milde would want to cross examine him on the other exhibit. I do not wanted to be limited by the usual rule of one man cross examining; as long as we do it on different exhibits.

If you want to go ahead as a convenience to Mr. Smith and have him testify on direct, I will be glad to have you do it.

The Trial Examiner: What is the particular advantage to Mr. Smith?

Mr. Cockley is present and we are ready for the cross examination with respect to the original cost. I can not see where it will affect Mr. Smith's convenience. He will have to be here for the cross examination, whether it is now or later.

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CROSS EXAMINATION by Mr. Cockley.

Q. As I understand, Mr. Smith, so far as Exhibits 57 and 57-A are concerned, you instructed your staff to prepare those in accordance with the Commission's code of accounts as interpreted by you to them. Is that right? A. Yes, sir.

Q. And while you do not assume responsibility for these figures in detail, you believe they have done that? A. That is correct.

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Q. And I suppose any examination about the detailed figures should be addressed to Mr. Pace or Mr. Dunn, or whoever will appear later? A. Yes.

Q. Is the same statement true with respect to the text appearing in the first part of these exhibits? A. That is right. As far as the detailed figures are concerned, the men who prepared them are responsible. But so far as principles are concerned, I am responsible.

Q. You did review Schedule 1 on page 10 of this Exhibit No. 57, did you? A. Yes, sir; I reviewed it generally.

Q. You reviewed it generally? A. Yes.

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Q. I will ask you if it is not a fact, Mr. Smith, that the figure appearing in the lower right-hand corner at the bottom of the page, $51,207,000, is not the figure that you find to be the original cost of this property? A. Yes, sir.

Q. And when I say that, Mr. Smith, we are always excluding the distribution system property? A. Yes, sir.

Q. I will ask you if it is not a fact that as developed on that page you started with a cost per books of the whole company of $53,306,000, shown at the bottom of column "D," accept some reclassifications in that which have been made by the company, with the same total amount appearing in column g, and then made some adjustments up and down in accordance with these principles which you announced and arrived at an adjusted book cost of $51,207,000. Isn't that so? A. Yes, sir.

Q. That figure developed there, as this exhibit shows in the title, is the investment in gas plant per books and as adjusted as of December 31, 1938, is it not? A. Yes, sir.

Q. It is an adjusted book cost? A. Yes.

Q. Isn't that so? A. That is right.

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Q. And I will ask you if the subsequent schedules that appear in Exhibit No. 57 and also in Exhibit No. 57-A are not in their entirety supporting details for this adjusted book cost of $51,207,000? A. Yes; adjusted book cost, meaning that we think that is a proper cost of the property.

Q. It is a cost that you got from the books of the company and adjusted downward to the extent of about two million dollars to arrive at $51,207,000? A. It is the cost that we got from auditing the company's books and records.

Q. But it is just what this exhibit calls it—the investment in gas plant per books? A. Yes, sir.

Q. That is the part of the original investment that was made at the time that was charged on the books of the company to plant account, isn't it? A. That is right.

Q. Now, I want to ask you another question. A. Just a minute, please. I had better explain that. There may be some difference of viewpoint here, and we ought to understand each other.

In all of our work we feel that we are compelled to start with book figures so that the company will know the

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derivation of every figure in the report. We presume the company knows what is in its books. By starting out with that figure and showing the adjustments we arrive at an adjusted figure.

We have done that in this case. We have shown the cost per books primarily for the convenience of the company in order that it may check thoroughly the stages through which we have gone to reach the final figure. I say the final figure represents what I think ought to appear in the books today as the adjusted book figure.

Q. Is there any doubt but that that figure of $51,207,000 as developed there and as supported by all these schedules, Mr. Smith, is an adjusted book cost? A. If you are attaching any specific weight to that, then I have to make myself clear, that I think the figure is a figure of real substance. It is the only valid original cost figure that I know of.

Q. Will you tell me what it is. As it is developed and supported here it is an adjusted book cost, isn't it? A. I think you are attaching some special meaning to the schedule which I may have to deny. The final figure does not appear on the books, if that is what you mean.

Q. The $53,306,000 appears on the books? A. Yes. That is the first figure, not the final figure.

Q. You adjust that downward by two million dollars

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or thereabouts and arrive at the adjusted book cost? A. We make adjustments to practically every account, and the effect of it happens to be an adjustment downward; and we get a final figure, which I say represents original cost under the Commission's Uniform System of Accounts.

Q. I did not ask you what you finally called this figure. I am only taking one step at a time. As this is developed here it is an adjusted book cost, as the exhibit shows, isn't it? A. I do not like to take—

Q. Can't you answer that yes or no? A. No; I cannot. It does not appear in the books, if that is what you mean. I don't understand what you mean by "adjusted book cost."

Q. I am only taking the expression that appears on this exhibit, which says "investment in plant account per books and as adjusted." You started with the plant account per books? A. Yes. And we say that that figure is wrong.

Q. You say that that figure is wrong by two million dollars? A. Yes.

Q. And you write it down two million dollars? A. We do not write it down. We make adjustments to show what the answer ought to be.

—2763—

Q. Is the effect of the adjustments to get a figure or a lower figure? A. A lower figure.

Q. And that is what you call here "as adjusted," and that means book cost as adjusted, doesn't it? A. It means more than that. It means it is the bona fide original cost figure.

Q. Does it mean that? A. In one sense, yes. In one sense we start off with a book figure and we make the necessary adjustments to it and arrive at another figure, and in one sense you could call that the book figures as adjusted. But the final figures have a lot of substance to them.

Q. Whether or not they have substance, the figures as developed by the Examiner's adjustment to the plant accounts as they appeared on the company's books, that is as the cost appeared on the company's books? A. That is merely the mechanics.

Q. Whether or not it is the mechanics, that is how it was arrived at, isn't it?

The Trial Examiner: As I understand it, that is the cost as arrived at by the application to the book costs of certain adjustments.

The Witness: Yes, sir.

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By Mr. Cockley:

Q. I want to refer you to the depreciation exhibit, which has not yet been identified, and ask you to turn to page 23. That is the exhibit that you are going to testify to next as to accounting principles, isn't it? A. I believe it is.

Q. I will ask you if the figure— A. I would just like to correct that slightly. It is more than accounting principles that I am going to testify to next.

Q. All right. I will accept that.

I call your attention to line 55 and note above it which says "net adjusted book cost December 31, 1938."

And opposite that, for the total plant, $51,207,000? A. That is right.

Q. And on page 8 of that exhibit you make a statement to that effect, don't you? A. Yes; I think I do. In the beginning I thought we were together, but you talk about adjusted book cost, which makes me think that we are not.

We use that as a convenient term to show the figures which we have arrived at as a result of auditing the company's books. Actually the final figure is not on the company's books.

Q. Of course, Mr. Smith, we have been over that sev-

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eral times. It is perfectly obvious from this schedule that the figure on the company's books is $53,306,000? A. That is correct.

Q. And you took some retirements which were not shown and made some other adjustments up and down and come out with the figure of $51,207,000? A. That is correct.

Q. Which was an adjustment of the company's book figures, wasn't it? A. That is right.

Q. Now, I call your attention to schedule 2, page 13 of Exhibit No. 57. That says, does it not, "The capitalized cost per books and as adjusted"? A. Yes.

Q. Is that a different basis? A. No; if is not.

Q. That means the same thing, doesn't it? A. Yes.

Q. What it means is that it is part of the cost appearing on the company's books in capital account? A. I can not go along with you on the word "part."

Q. I will accept that. It is the dollars that the company capitalized in its plant account as the cost at the time, isn't it? A. Yes.

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Q. That means precisely the same thing, doesn't it? A. Yes.

Q. Does this expression that I see on schedule No. 1, "Investment in gas plant per books" mean the same thing? A. Yes.

Q. At another place on page 4 it says, "Total cost of gas plant in service per company's books." A. The same thing.

Q. That mean the same thing? A. Yes.

Q. And all of them refer to this $51,207,000 that is developed and supported by all of these succeeding exhibits? A. When you use the language "per books," then you relate it to the books.

Q. We understand each other. If it says "related per books" that means the $53,306,000. If it says "per books adjusted" it means the $51,207,000, doesn't it? A. That is correct.

Q. And it is that figure that you also call on the face of this exhibit the original cost of gas plant? A. Yes, sir.

Q. And isn't it a fact, Mr. Smith, that there is not a table or figure anywhere in here that develops and supports that figure of $51,207,000 except Schedule No. 1 which is the summary and the supporting sheets? A. They all sup-

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port it.

Q. And they support that figure which, in the first instance, is an adjusted book cost which you also say is original cost, in your view? A. Yes. I am sort of sorry we had "adjusted book cost" in view of the apparent interpretation that you place on it. To me it means the original cost.

Q. That is, to you, an original cost of an item of property is whatever the company has recorded at the time on its books? A. No, sir; only in accordance with sound accounting principles.

Q. Omitting accounting errors? A. That is correct.

Q. Omitting accounting errors, it is whatever the company charged on its books at the time cost? Is that right? A. If whatever it charged on the books then was proper, that follows.

Q. In company Exhibit No. 20 it purports to show an original cost of Hope Company's property at December 31, 1938 of close to 70 million dollars, in round figures. A. Yes, sir.

Q. And am I correct, Mr. Smith, that the principal difference between that statement and Exhibit No. 57 relates to only four or five general items? First, and by far the

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most important, is the direct material and labor costs of various kinds which the company in the past had charged

at the time to operating expenses and had not capitalized. A. I will have to deny it so far as direct material is concerned. I found no evidence on my visits to the company's offices of direct materials. But certainly the big difference represents labor costs in drilling wells. That is by far the largest item.

Q. Is it your statement that if material costs were charged at the time to operating expenses that would be an accounting error which you now restore? A. No; only if it were in connection with replacements which were generally charged to expense my answer is no.

I might say right now we think that Mr. Antonelli, who prepared the exhibit, did not have support for some of the material cost he shows there. But that will be taken up by another witness who is making a check of the matter.

Q. Then you are not going to say that if there are materials appearing in there that they should be there? A. No. You would have to go back to see whether they represented items which were properly charged to maintenance. In other words, if you set out to get all of the possible costs of plant you could get one figure; if you set out to get all of the possible items which could be charged to expense,

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you would get another figure; but the same items would be in both accounts.

Q. Let's get back to the main differences. You say one of the principal differences is the question of these direct material and labor costs insofar as they involve materials charged to capital account and which your men have not included in capital account? A. Yes.

Q. And the biggest item of that is well drilling cost? A. That is correct.

Q. That is about $12,500,000? A. It is a large item.

Q. And that represents the cost of wells drilled by the Hope Company or by the company from whom the Hope Company purchased them that were at the time not capitalized? A. That is correct.

Q. The second item of any importance was these overheads to which you testified, which at that time were not capitalized? A. Yes, sir.

Q. And those are the two principal items, are they not? A. I believe they are.

The Trial Examiner: At this time, gentlemen, we will

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take a short recess.

(Thereupon, a short recess was taken, after which the following occurred:)

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The Trial Examiner: You may proceed with the examination of the witness.

By Mr. Cockley:

Q. Mr. Smith, I direct your attention to schedule No. 1, appearing on page 10 of exhibit 57. I am correct, am I not, in saying that under account 332.1, producing gas well, well construction, you have in there in the adjusted column "J" a little over four million dollars to represent the drilling cost of all of Hope's wells that were in use on December 31, 1938? Is that right? A. Yes; that is right. That is the proper cost of well construction of the wells which were in existence on December 31, 1938.

Q. And Mr. Antonelli has in exhibit 20 an item of about approximately 12½ million dollars higher than that? A. I believe that is correct.

Q. Will you tell me if it is not a fact that this item of four million dollars which you have in there represents the drilling cost of about 700 out of 3,300 wells, Mr. Smith? A. I don't know.

Q. You can't answer that? A. I cannot.

Q. You do know that prior to 1924 or, rather, be-

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fore 1923, the Hope Company charged those drilling costs to expense and did not capitalize them? A. That is cor-

rect. I would estimate that there is a substantial number of wells which do not carry drilling costs in the plant accounts.

Q. And of the total difference between the figures in exhibit 20 and those in exhibit 57 of something over 18 million dollars, 12½ million dollars is in that one item, isn't it? A. That is right.

Q. Now, Mr. Smith, I want to ask you one or two questions to get straight on this. Assuming that in 1920 the Hope Company drilled a producing gas well and the work order of the Hope Company shows that it properly expended $10,000 for materials and $10,000 for well drilling and other construction costs, on these assumptions and omitting any consideration of overheads for the present, are you agreed that the money actually paid by the company in drilling and equipping these wells was $20,000? A. Yes; I think the money paid was $20,000.

Q. There is no doubt about it? A. There is no doubt. But that does not necessarily mean that it is a valid cost at this date of that well.

Q. We will come to that later. There is no question but that the company originally paid $20,000, and prop-

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erly paid $20,000 for drilling and equipping that well? A. That is right.

Q. Can you tell me what was the cost of that well to the company? A. The cost of that well at that time might have been, in the assumed case, $20,000. But still that does not shake my principle that the valid original cost is $10,000.

Let me state it this way.

Q. I am not interested in whether it shakes your principles or not. I want to know if you can answer the question. Before any bookkeeping on that well was done the cost of that well to the Hope Company was $20,000, was it? A. Yes. I think I can go that far.

Q. At that time was the original cost of that well $20,000? A. Knowing nothing further, yes.

Q. And the actual legitimate cost was $20,000? A. So far, yes.

Q. There is no doubt about that, is there? A. There is no real doubt any more than that the cost of paint on a building is an actual legitimate cost under the theory that you mention, until you get to the operating and account-

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ing stage and stage of producing revenues, and then we have a different situation.

Q. Then, what you say is that although the original amount of money paid for this is $20,000 the actual cost and original cost and legitimate cost of that is $20,000; if the company subsequently records only a part of that cost in its plant account, then the $20,000 ceases to be the actual cost or the original cost? Is that correct, Mr. Smith? A. Oh, no. I think that again we are following abstractions and an isolated case. I think when you reach the operating stage and the company treats those things as expenses, they are bona fide expenses. The fact that you put a new inner tube into a tire gives you a new cost of that tire. You deal abstractly with it. The inner tube and tire must be taken. But we are getting away from realities when we do those things and we forget how businessmen run their businesses; you are following an abstraction.

Q. It is not my purpose to argue with you as to why you do this, because this cross examination will be unnecessarily prolonged. If you feel that you must make some explanation of your position and that it requires some defense, of course, you can volunteer those things. But I want a direct answer to my question as to how you treat

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these things. A. I have an obligation here to give a full answer, too, I believe.

Q. I don't want to preclude you from doing that, Mr. Smith.

Mr. Springer: I object to the characterization of the response of the witness by Mr. Cockley. He is certainly entitled to explain any answer.

Mr. Cockley: Mr. Smith is a very intelligent witness and a capable witness.

The Trial Examiner: Let's proceed with the examination of the witness.

By Mr. Cockley:

Q. Now, let's come to the bookkeeping, Mr. Smith. Suppose the company, in the case that we have assumed, capitalized on its books the whole of that $20,000 for labor and materials and now carries that amount on its books; there would be no doubt in your mind that that would be the book cost and still be the original cost? A. That is correct. And we would not change it.

Q. And you would not change it? A. That is right.

Q. Am I correct in saying that if the whole of this substantially 12½ million dollars in the well construction accounts had been originally capitalized by the company

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on its books that there would be no question in your mind now but that it would be part of what you term the original cost? A. If we can go one step further and assume that that was the general practice of the industry, certainly we would have no difficulty.

Q. Assuming that it was an acceptable practice? A. Yes. We would have no difficulty. In other words, where there are alternative methods of accounting—and there are alternative methods—and you follow one system, I will accept that scheme, provided you apply it consistently. That is the only way, Mr. Cockley, that you are ever going to have any consistency in the determination of profits or income and determination of cost of plant.

Q. Am I further correct in saying that substantially the whole difference between exhibit 20 and the total

figure at which you arrive here in exhibit 57, if the company had at the time capitalized all of the items which it shows and which you disallowed—if I may use that expression—you would have now included them in original cost? A. No; that is not quite so. We think that Mr. Antonelli in his study has resorted to some arbitrary estimates which we would not allow in any event, because we do not think

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the items would ever have appeared on the books; but to the extent the items would have appeared in the books, if you had followed one of the alternative methods of accounting, we would have accepted them.

Q. That is applicable to the $19,000,000. That is a relatively minor item. A. It may be a substantial item. Someone else is going to testify to some of the amounts.

Q. If they had been actual expenditures at the time capitalized in the accounts, so that the question of estimates was out of it, you would have allowed a substantial figure? A. That is correct—assuming the entries would have conformed to accepted principles and practices.

Q. You don't mean to say that that has to be the universal practice in the industry? A. No.

Q. And you recognize, do you not, that some gas companies did capitalize these well drilling costs in the past and others did not? A. There were very few of them which capitalized them, so far as I know. We made diligent inquiry and found very few companies; and I don't think we found any that capitalized the items regularly before about 1919, when the Pennsylvania Commission required cap-

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italization. Overwhelmingly natural gas companies charged those items to expense, and the Commission acted upon them as expense.

Q. That is your assumption, that they acted upon them? A. They had to.

Q. Suppose they did act upon them; what difference does it make? A. All the difference in the world. If you treat something as expense which is treated as expense by the industry and everybody in the industry recognizes it as an expense, and executive decisions are made on those assumptions, you can not go back and undo it or change the rates or the moneys which you collected from the customers, which were based upon the accounting for well drilling expense.

Q. Suppose you have $10,000,000 of well drilling costs; suppose the condition of the well drilling accounts charge is 50 per cent; that would mean that you would have at least $5,000,000 to set up in your rate base on your asset side, wouldn't it? A. I think so. The net amount—actually you set up twice that amount and have the reserve offset it. The net amount would be as you indicate.

Q. If you would figure it at a net basis you would take the depreciated condition of the dollars, whatever

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dollars you set up for it originally? A. That is correct.

Q. So it would be about $5,000,000? A. That is correct.

Q. And if you allowed 12 per cent to cover both depletion and return on that, you would get in operating expenses about $600,000, roughly, wouldn't you? A. Your return does not get into operating expenses.

Q. Well, it does for the purpose of a rate statement, doesn't it? A. The return is profit. It never gets into the expense. I don't want to have these differences on technical matters.

Q. You are talking as a technical accountant, aren't you? A. Yes.

Q. As a practical man, when you get over into operating expense which you consider for purposes of fixing rates, you get about $600,000 on that, and you would get about $600,000 expense and return. If on the other hand,

instead of having anything in capital account for these items you put over into operating expense about $600,000, your rate would be precisely the same, wouldn't it? A. The rate?

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Q. Yes; the rate at which you arrived would be precisely the same? A. I don't see that.

Q. The price at which you sell your gas to cover this cost would be precisely the same? A. No; I don't think so.

Q. You think it makes a difference whether $600,000 is the amount of expense or whether $600,000 is the return plus depreciation or depletion it would be expense? Is that your statement? A. I think it makes a big difference as to what you consider expense. I am having difficulty in following your questions. The questions are confusing to me.

Q. I do not mean them to be confusing. Of course, I am not an accountant, and I try to state it simply from the point of view of the effect on rates. Actually in either case you are going to get $600,000 in some form or other? A. No; I don't think so. In the latter case you are going to try to get $600,000; but in the first case if you do not have any expense, you are not trying to recover something for expenses which are not incurred.

Q. Then your statement is that there is a difference between those two situations? A. Yes; I think there is all of the difference in the world—

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Q. That is sufficient. A. —as to your action based upon what expenses are shown by your income statement.

Q. Let's come back to the bookkeeping. You have already stated, I think, that if in the case we assume, where a company had properly spent $10,000 for equipment and $10,000 for drilling a well if they had capitalized the whole on their books, you would now allow it as a part of the original cost? A. That is correct.

Q. Now, suppose that instead of doing that they capitalized only the material and charged the labor cost to expense, which Hope did prior to 1923; I understand your position to be that you would now consider the original cost of that well and the book cost to be the same, namely, $10,000. A. There is no doubt about it. And I gave an illustration which I would like to repeat.

Q. You have answered the question. A. I want to give this illustration and drive home that point.

Q. Now, just a minute, Mr. Smith, please. I am going to object to these voluntary statements. I am merely trying to ascertain the position of the witness about these things. I submit it is not a matter subject to debate every time I ask a question.

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If I can not be protected in pursuing the cross examination in my own way to develop facts and not accounting theories, we will never end the cross examination. If Mr. Springer wants to ask further questions when I have finished, of course that is his right.

Mr. Springer: We are dealing with accounting principles. When Mr. Cockley opens the door on an accounting principle by a question, certainly the witness is entitled to explain his answer. That is all he is attempting to do.

The Trial Examiner: I think he is entitled to explain his answer, but it did not seem to me that that last answer required any particular explanation.

Mr. Springer: May we have the last question and answer read, Mr. Examiner?

(The question and answer were then read by the reporter.)

By Mr. Cockley:

Q. That is an illustration.

And Exhibit No. 57 is set up on that basis?

Mr. Springer: Just a minute, please. We have not had a ruling. I think the witness is entitled to explain his answer.

The Trial Examiner: I understood that; but I do not understand that there is any objection pending. There is nothing to be ruled upon.

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Mr. Springer: No, but he is not given an opportunity.

Mr. Cockley: I object to the witness going into and giving other illustrations.

The Trial Examiner: I think an explanation and an illustration are two entirely different things. If the witness wants to explain his answer, he may do so.

The Witness: What I wanted to do was to point out that in this very case we have a problem of that nature involved in the determination of income, that is delay rentals. In the course of time, I think delay rentals will amount to more than the cost of well drilling which has been charged to expense. And whatever ruling may ultimately be made in regard to the well drilling expenses ought to be made with the full realization that delay rentals are in the same category.

By Mr. Cockley:

Q. Have you finished? A. Yes.

Q. Did I correctly state your position in my last question? A. You did.

Q. Now, Mr. Smith, suppose a company, in accordance with the practice followed by other companies at the time, although not the universal practice or a practice of universal application, had charged both the cost of drilling and

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equipment to expense; is it your present position that both the book cost and the original cost of that well is zero? A. No.

Q. On that theory, I suppose that would be an accounting error? A. That is correct.

Q. Let me understand you. Did you understand from my assumption that I assumed that that was the practice that was followed by many companies at the time? A. That would not have conformed to accepted principles of accounting. If you assume that it did conform to accepted principles of accounting, I would go along with you. But it did not conform to accepted principles of accounting.

Q. But if it had conformed to accepted principles of accounting, by which you mean a principle which was applied with some degree of generality— A. And which certified public accountants would certify to unhesitatingly. There is one qualification we must make. We are dealing solely with original costs. You will recall I testified if something were charged to expense in error and it were recovered from the rate payer, as a regulatory measure I doubt that you should recover that cost again, regardless

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of the fact that the error was made. That error would not bind me as far as getting original cost in the accounting sense is concerned.

Q. You did not make any investigation to determine whether any of these costs were recovered from the rate payer, did you? A. I had an idea they were all pretty generally recovered.

Q. That is based on your general assumption? A. No, on the assumption that this company has been very profitable during its existence.

Q. Am I right, Mr. Smith, that it is only true that you could be said to recover the things from a rate payer in the event that your rates would have been fixed at a higher rate if you had expensed these items than if you had capitalized them? Is that right? A. Yes. It goes one step further; by reason of the fact that you have treated this cost as expense and all others treated it as expense, naturally these costs were considered by management as expense in fixing rates.

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Q. Well, you didn't, in your investigation, go any further, did you, than to ascertain the fact that these drilling costs and some other items that you have eliminated, were recorded on the Hope Company's books as expenses? A. Oh, yes, we went farther than that. First of all, you left out one essential element. We determined that they were charged as expenses in accordance with sound principles and practices of accounting. As a matter of fact, we added to your plant accounts about $1,400,000 which we felt had been charged off in error, and when you say that we have reduced the plant accounts some $2,000,000, actually we have increased the plant accounts.

You yourself made an adjustment recording unrecorded retirements. When you make allowance for adjustments, we have increased the plant account by about $1,400,000.

Q. What I meant was, Mr. Smith, you did not investigate the basis on which the company's rates had been fixed at any time in the past, or whether those rates would have been higher or lower if, in the past, it had capitalized well drilling costs instead of expenses, did you? A. We made a study of earnings with that purpose in mind.

Q. Well, general earnings, you mean, of the company? A. That is right.

Q. Well, I am asking you specifically if you made any

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study to determine where the company would have come out if it had capitalized these well drilling costs instead of expensing them, and whether it would have larger or smaller amounts? A. Yes, I made some study of that. I found that your company, for instance, claimed some of those items as expenses, the Clarksburg Company claimed them as expenses, at least, before the West Virginia Commission, and they were allowed as expenses. I found other commissions allowed them as expenses.

Q. Well, now, let's see. Our company claimed them in a case before the West Virginia Public Service Commission decided in 1921, wasn't it? A. I believe it was.

Q. And isn't it a fact that that rate case affected only 4 percent of the company's total volume of business? A. I don't know, that is of no consequence to me, however—

Q. (Interposing) Isn't it a further fact that it affected only the domestic consumers in West Virginia, whose rates here aren't under consideration? A. There is no difference in principle, Mr. Cockley—

Q. (Interposing) And isn't it a fact that in that same case, if the company had presented its evidence on the basis of a capitalization of drilling costs, with appropriate allowances for return and depletion on those costs, it would have had just as high a rate as was allowed it? Did you

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investigate that? A. I don't know what it would have been, if you had done something else. I do know you claimed them as expenses, and they were allowed as expenses, and others did the same thing.

I do know that the items we have mentioned were generally considered as expenses, at that time, and I repeat that I think regulatory commissions are responsible for the change.

Q. Now isn't it a fact that both times that the Ohio Commission, in 1932 and 1937, had the question of the Hope's East Ohio rates before it, that well drilling costs were capitalized and were not in any sense expensed?

Mr. Springer: I object to the testimony of Mr. Cockley. There isn't any evidence in this case of the practice in those other cases that he has presented.

Trial Examiner: Well, I understood this witness to testify that he had certain information on which he was basing his opinion, and that information consisted of these rate cases; is that correct?

The Witness: Yes, sir.

Mr. Springer: Well, in each one of Mr. Cockley's ques tions, he testifies to information that I doubt this witnes would have the details of to determine the accuracy of—

Mr. Cockley: (Interposing) Well, the witness can per fectly well answer. I said, "isn't it a fact"—and if h

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doesn't know whether it is a fact, he can say so.

Mr. Springer: Make them assumptions, and I will g along with you.

Mr. Cockley: I don't make assumptions—

The Witness: (Interposing) What were the years, Mr Cockley?

By Mr. Cockley:

Q. Well, in the 1932 Akron case, and the 1937 Cleve land case. A. Well, I think that is correct.

Mr. Reeder: Just a n ute, Mr. Examiner. I want t move to strike that question and answer unless counsel wil say, capitalized by whom. If he wants to say it wa capitalized by anybody in particular, I want to ask for strict proof.

Mr. Cockley: Well, I have asked the question and i has been answered.

Mr. Reeder: I am pressing my motion to strike, be cause it is my recollection that in 1931, in the Clevelan case, the Ohio Commission didn't find a valuation of th Hope property, and I have heard Mr. Cockley say that ove and over again—

Mr. Cockley: (Interposing) That is right, and if yo had listened to my question, instead of objecting, you woul have noted that I said in the 1932 Akron case, and in th 1937 Cleveland case that it was capitalized by the Commis sion; is that not the fact, Mr. Smith?

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The Witness: Mr. Cockley, I made inquiry from th Chief Accountant of the Public Service Commission of Ohi

regarding that matter a year or two ago, and the information he gives me corroborates your statement. That is the extent of my knowledge.

Trial Examiner: The objection is overruled.

Mr. Reeder: I withdraw it, I am sorry, I didn't hear it on account of the noise.

By Mr. Cockley:

Q. Now those cases before the Ohio Commission, to which I have just referred, are the only times within your knowledge, are they not, when the export rates of the Hope Company had been under consideration by any regulatory body until this present case? A. I have no knowledge of any other case.

Q. Mr. Smith, getting back to these well drilling costs and how they are charged on the books, as I understand your testimony, if there were two companies, each of which drilled a well at a cost of $10,000 for construction and $10,000 for equipment, and one company capitalized that all in its books and the other charged the well drilling to expense, and those companies came here before you to set up their accounts in accordance with the Uniform System of Accounts, one of them would have the well in at $20,000, and the other would have it in at $10,000, is that not so? A.

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That is true, but that is not unusual, Mr. Cockley. I have got to make myself clear on that—

Q. (Interposing) Do you think that answer needs some explanation? A. I think it does. There is an implication there that that would be a wrong situation, and it would be a perfectly valid situation. I think I ought to be given the opportunity to explain it.

Q. Well, if you think your position, standing alone, requires explanation, go ahead and explain it. A. Well, it does.

Q. I haven't asked you for an explanation, have I? A. No.

Q. You are volunteering it? A. Yes.

Trial Examiner: Have you completed your answer now, Mr. Smith?

The Witness: It is not the kind of answer that I would like to stand by itself. I think someone reading it may be misled.

Trial Examiner: Go ahead with your explanation.

Mr. Cockley: Go ahead and explain it.

The Witness: Today, when an electric utility replaces a cross-arm, some utilities treat that as a maintenance item, and some treat it as—

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Mr. Cockley: (Interposing) I object to accounting for electric utilities now. We are talking about a plain, simple question of drilling costs of natural gas wells.

Mr. Springer: We have had testimony that the principles of accounting are the same for all utilities.

Mr. Cockley: Well, we shouldn't have had.

Trial Examiner: Well, it seems to me--

Mr. Cockley: (Interposing) If the witness wants to explain this particular question, I have given him the opportunity to do it.

Trial Examiner: Could you use some item used in the gas industry instead of a cross-arm, for instance?

Mr. Cockley: Use this item.

The Witness: I will use a pipe. A company can take each unit of pipe as an item of property, and every time it replaces a length it can put it through its plant accounts; or it can charge it to expense. Over the course of years you are going to get a different answer for those two companies.

The point I make is that you will always have different answers for any two companies.

I know from my experience that any two utilities, any two department stores or businesses of any kind, with plants, will have different results when it comes to their plant costs applying to exactly the same items.

Mr. Cockley: I move we strike out the discussion about

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department stores; I think that is entirely too far afield.

Trial Examiner: We are discussing accounting principles, and I can't see that it makes any particular difference.

By Mr. Cockley:

Q. Well, it is a fact, isn't it, Mr. Smith, regardless of the reasons for it, that your position is, and your interpretation of the Uniform System of Accounts, and your method of determining original cost, is that you would freeze the accounting practices of the company, if they were not due to error, in their statement of plant accounts to be filed with this Commission? A. Absolutely, because I think their accounts have been kept correctly. Otherwise—

Q. (Interposing) And then if one company did it one way, and another company did it another way, and on some other feature the same thing was true, you would preserve in those plant accounts, for those various companies, the elections—if you want to call them that—which they had made between accounting practices, and all the variations in accounting practices that they had followed over the years, would you not? A. Assuming that the practices were in accordance with accepted principles of accounting.

Q. I am talking about nothing else. A. Absolutely, I most assuredly would insist upon it, and, Mr. Cockley, just

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imagine the position this Commission would be in if it didn't insist upon it.

Today your company is not following the same practice as all other natural gas companies. A few years from now this very company could come in and do the same thing over again. You have got to have a finality to this accounting sometime or other.

Q. Isn't it a fact that if the book costs of these companies, or of A Company were set up in accordance with its accounting practices—assuming always that there was no, what you call, accounting error—and B Company were set up in accordance with its accounting practices; and C Company were set up in accordance with its accounting practices—you would have no uniformity whatever in a statement of plant accounts for those three companies? A. Oh, yes, you would have a uniformity, but it wouldn't be absolute or a precise uniformity, and I don't think it is humanly possible to get precise uniformity. That is one of the real reasons why, once you account for something in accordance with a principle, that you ought to abide by it.

Q. Your interpretation of this Code of Accounts is,—this so-called Uniform System of Accounts,—that it was intended to require gas companies to preserve the accounting methods that they had pursued from the beginning of time, so long as there wasn't any accounting error? A.



That is correct, and that has been my practice for 20 years.

Q. Well, you mean that that has been your interpretation? A. I mean that I have audited oil companies 20 years ago, which charged well drilling to expense, and I found it was a generally accepted practice and made no change in it. I still think I was absolutely right in doing so.

Q. Now, Mr. Smith, I want to ask you one other question. Suppose two companies, such as we have assumed, drilled two wells, or each drilled a well, with a total labor and material cost of $20,000.

One of them put it in its plant account at $10,000, and the other put it in at $30,000. Now in each case $10,000 of that would be the book cost, wouldn't it? A. Will you read that?

Q. Well, it is simply a case of two companies each spending $20,000 to drill and equip a well,—one of them

charges it on its books at $10,000, and the other at $30,000. A. I can't see why one would charge it at $30,000?

Q. Well, they might have had a re-appraisal. A. Of course, that would be most unsound accounting.

Q. Well, do you mean to say that there is never inflation that gets into these costs at all? A. Not if I can help it, there won't be any inflation.

Q. Before you came into the picture? A. I think com-

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missions, since they started regulating accounting—and one of the first jobs a commission undertakes when it gets organized is to regulate accounting—generally have tried to keep inflation out of the accounts.

Q. If it will make you feel any better, suppose we say that one company sells their well, which cost it $20,000—it is a utility, and it sells this well to another company for $30,000. It would then be $30,000 on the books of the accounting company, wouldn't it? A. There is no affiliation between the companies?

Q. No affiliation. A. That is correct.

Q. It is a good well, it is honestly worth $30,000. A. O. K.

Q. Now you would set that up in your plant accounts as $20,000, wouldn't you, and show the $10,000 additional in account 107? A. No, sir, we would show it as $30,000. An individual well is not an operating unit or system.

Q. Well, I assumed that it was. I want to take the assumption where it is an operating unit or system. A. Then you have got to get a business with customers attached, and a going business, and when you buy a going business, you can't tell how much you pay for the well. That is exactly why we have this original cost provision in

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the System of Accounts.

Q. All right. Suppose it is a case where one utility sells to another what you would call an operating unit, and

the purchasing utility puts it on its books at $10,000 or $100,000, whatever it has paid, above the cost of the selling utility? A. Yes, sir.

Q. Am I not right that you show, in your adjustment account—100.5—the amount that is paid over and above the cost to the selling utility, is that not so? A. That is correct.

Q. As shown by its books? A. That is correct.

Q. And if there were a re-appraisal which appeared on the accounts at any time, of a given item, you would show that in some plant adjustment account, would you not? A. If the appraisal figure on the books of the selling company were less than the cost to the purchaser, all the excess would go into account 100.5, but if the purchaser put on an appraisal figure higher than cost, then the excess would go into the account 107.

Q. And if that were done, the write-up, or the inflation, whatever it is, would not disappear from the company's accounts, would it? A. Oh, yes, it would disappear

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eventually, because both account 100.5 and account 107 provide that the amounts included therein "shall be disposed of as the Commission may approve or direct."

Q. But the information would be shown by the accountants for the benefit of the Commission, and the Commission would decide what ought to be done with it, would they not? A. Yes, the Company still having a right to petition the Commission for disposal in accordance with its wishes.

Q. But you believe that that is a proper method of accounting for the accountants to show the facts as to the amount of the inflation, if there is any, and that the Commission disposes of it as it sees fit? A. I will go one step farther,—I think if it is real inflation, the Commission ought to order it charged off at once.

Q. Regardless of what your views are as to what the Commission ought to do, you think it is an accountant's duty to show any overstatement of costs, isn't that so? A. I will go farther than that. I don't think the accountant has any right to sign his name to a statement containing inflation.

Q. Well, are we agreed as to what inflation means? Do you call it inflation if a company legitimately has paid more than the cost for the acquisition of property? A. No, sir.

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Q. Well, then, call it just an overstatement, and assume it is a mere overstatement? A. Just payment in excess of original cost.

Q. And the Commission will be advised by the accountants of all the facts, the amount of the increase over original cost, will it not, and the Commission could dispose of it as it saw fit? A. It would, indeed. We would go farther, we would try to show to what it relates, if we can possibly do it—

Q. (Interposing) And you believe it is an accountant's duty to bring out all those facts, and that that is one of the purposes of the new System of Accounts? A. That is right.

Q. But it is your interpretation of that System of Accounts that it applies only to overstatements and does not apply to any understatements of original cost, is that right? A. That is absolutely not so. Account 100.5 may contain a credit figure as well as a debit figure.

Q. But Account 107 would never show any difference on your interpretation, between the actual money paid by the company in the construction of property, and the book cost of that, would it? A. Well, it would show other things. Account 107 will show chiefly write-ups. It will also show unrecorded retirements when we find them, until the time comes when the entries are made correcting the

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adjustments. Sometimes we find that a discount on common stock is charged to the plant accounts. That discount does not belong in the plant accounts at all, and we show that in Account 107. Generally speaking, however, Account 107 is designed to include any amounts of inflation in the company's accounts.

Q. But not to show understatement? A. Not 107.

Q. Well, this says, "This account shall include the difference between the original cost, estimated if not known, and the book cost of gas plant, at the effective date of this System of Accounts, to the extent that such difference is not properly includable in Account 100.5, Gas Plant Acquisition Adjustments."

Now am I right that it is your construction of that, and you have so advised your examiners, that if the money actually paid by the company in the acquisition of property, actually paid by the company in the construction of property, is higher than the cost as recorded on its plant accounts, the difference shall not be shown in Account 107? A. Again, we are assuming that the costs were accounted for in accordance with accepted principles?

Q. That is right. A. It does not go in 107.

Q. Well, "accepted principles" as we have discussed

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them before—I mean they followed the practice of other companies which was recognized as not an improper practice at the time? A. Well, if you speak of the well drilling costs in this case, we have a specific example; those well drilling costs should not be restated with the offsetting credit in Account 107.

Q. In other words, in that case you do not show the Commission the difference between the money actually paid for the construction of the property in the first instance, and the book cost? A. Mr. Cockley, we do not, we can never show the Commission pure cost in some abstract

fashion, forgetting how those costs have been accounted for. The Commission knows in this case that these items have been charged to expense, and if it had not been brought out already, we would make it clear to the Commission that they had been charged to the expense.

The items have been brought out, but in addition we intend to file a reconciliation statement showing exactly how those items have been accounted for. So in this case, at least, we will give the Commission all the information.

Q. Have you finished? A. Yes, sir.

Q. Mr. Smith, will you tell me what is theoretical and impracticable about going back to the original work orders

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of a company which show in detail the dollars it has spent for equipment and for construction costs of a well, and setting up those dollars as the amount of money actually paid for the construction of that property? A. Can't we eliminate the item of equipment from your question?

Q. Well, work orders show both, don't they? A. Yes, but only the costs of drilling were charged to expense.

Q. That is right. A. I would say that we would be absolutely wrong to take those drilling costs which were charged to expense and put them in a statement and say to the Commission, "This is our understanding of the original cost of this property." We have got to get down to realities and actualities in this thing. Things which are charged to expenses, and are properly expenses, I would never put into plant accounts.

Q. I object to the lecture, it isn't necessary. I am just asking you what is impracticable about determining the cost as shown by the work orders of the company, and the records of the company, and what is theoretical about it. A. Well, it is wrong. As far as being practical, you could do it or you can make a statement of any kind of figures you want, but it would be wrong to do it.

Q. Do you think it would be wrong to tell the Com-

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mission in a rate case how much money the company actually and properly spent in the construction of property now in service, whether it was charged to expense or capital account, or where it was charged, or whether it wasn't charged at all? A. No, Mr. Cockley, it would not be wrong to tell the Commission that. It would be wrong for us to bring an original cost statement in, in which were included those items and overheads previously charged to expense, and to say to the Commission, "We think this is the original cost," when we do not think that.

Q. Will you answer my question?

Mr. Reeder: I object unless the witness has had a chance to finish. I think he ought to have a chance to finish.

Trial Examiner: Go ahead and finish your answer.

The Witness: I think I have finished.

Mr. Cockley: I move to strike the answer as non-responsive.

Trial Examiner: I can't agree with you; it seems to me that the answer was responsive to the question. Read the question, please.

(The question was repeated by the reporter.)

By Mr. Cockley:

Q. Well, you agreed at the beginning, didn't you, Mr. Smith, with me that if a company had properly spent $10,000 for well equipment, and $10,000 for labor for constructing a single well, and if you didn't know anything

—2804—

about the bookkeeping, that the original cost of that well was $20,000? A. At that time, yes.

Q. And you think that your interpretation of the uniform code of accounts is that you do not need to show all of these costs shown by the company's records to have been expended for the construction of the property, all of these drilling costs for the construction of some 2600 wells, not

a one of which appears in your exhibit? A. I don't think we ought to show them as part of the plant cost.

Q. Well, as I say, you think your code of accounts precludes you from doing that? A. I am sure of it.

Q. You are absolutely positive about it, are you? A. Yes, I am positive about it.

Q. And that has been your consistent interpretation of it, hasn't it? A. Yes, and it has been my practice in determining original cost.

Q. And that is based on paragraph 2(b) which you read this morning, isn't it? A. Yes, and much more than that. The auditors who audited the Standard Oil Company and the Hope Company,—Price, Waterhouse—didn't find any fault with the fact that these things were charged to expense, it was a sound principle.

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Q. Were those auditors determining original cost? A. They were certifying to financial statements which showed cost.

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Q. Were they testifying in any respect to the statement of cost contained in this definition of accounts, which means the amount of money actually paid for property or services, or the cash value at the time of the transaction of any consideration other than money? A. Yes, indeed, that is exactly what "cost" means, and they were required, under the rules of the Securities & Exchange Commission to conform to a general principle of that nature, or to qualify their statement.

Q. And when it applies to original cost it means that cost to the first company devoting the property to public service? A. Now you are talking about something else.

Q. I see; all right.

Now isn't it a fact, Mr. Smith, that, except for some general overheads charged after 1923, none of the expenditures made by the company in excess of book costs, and here

in question between us, were charged to expense in accordance with any uniform system of accounts in effect at the time? A. As far as I know that is true.

Q. Isn't it a further fact that they were not so charged in accordance with the discretion of the management as exercised under such uniform system of accounts? A. That is true. Mr. Cockley, upon reflection I would like to say that the items were charged to expense under the discretion of management, but not under a uniform system of

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accounts.

Q. Well, I just read you the phrase as it appears in Instruction 2(B) which you read. A. That is right.

Q. Instruction 2(B) says:

> "It is likewise . . intended that adjustments shall be made to record in gas plant accounts amounts previously charged to operating expenses in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts."

A. I want to make it clear too, that, as I testified this morning, that was put in to show that nothing in the system of accounts changed the general rule. We were afraid someone would construe the system of accounts as authority for doing that thing, and we wanted to show that that was not so.

Q. Isn't it true that there are other accountants and auditors, who had something to do with the determination of that final form of the system of accounts, who take a slightly different view of the purpose of this than you do? A. I don't know about individual auditors, I know that the Committee on Statistics and Accounts of the National Association takes the same view that I have. Officially, its view is the same.

Q. Well, the Pennsylvania Commission hasn't inter-

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prefed it that way, have they? A. As far as I know they have. In my last conversation with a representative of the Pennsylvania Commission he stated that he did not think that items previously charged to expense in accordance with the established principles of accounting at the time, should be restated.

Q. Well, that Committee interpretation that you just referred to is one that you had a pretty large hand in writing, isn't it? A. It was written originally by the chairman of the committee. I toned it down somewhat; it went farther than I wanted to go. I edited it and revised it, but it was written originally by the chairman of the committee.

Q. But it wasn't adopted at any time by the Association, was it? A. No, by the committee; the Association authorized the committee to send it out under its own name, the Executive Committee of the Association did that.

Q. They all do that, don't they? A. No, this was special. The Executive Committee of the Association at a formal meeting authorized the committee to send out that document.

Q. Well, they didn't approve it? A. The National Association doesn't approve any committee reports as such, as I understand it.

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Q. Well, they accepted it as the Committee filed it, and authorized them to send it out; isn't that what happened? A. That is correct.

Q. And was there any effort made to have them adopt it? A. No, sir.

Q. None to your knowledge? A. None to my knowledge. I think it would be unusual to have them adopt a report of that kind.

Q. All right. I want to ask you just one or two more questions.

It is a fact, is it not, that in the company's income statements for the test years as set up here, it has not included any well drilling costs in those annual expenses? A. That is correct.

Q. It has not included any construction overheads in those annual expenses? A. Well, it has included overheads in expenses; it has, for some of the years, prorated some of the overheads to construction.

Q. Well, it has eliminated, has it not, the amount of overheads prorated to construction, from its annual statements? A. That is right.

Q. The expense statements? A. That is correct.

Q. And so far as the annual statement of the com-

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pany's income is concerned, under its rates, its operating statement, let us say, and the rate base it offers, it has been entirely consistent as between the two, has it not, so far as you now know? A. Yes, in a way it is consistent. Ours is consistent too, but the consistency is in different respects. Ours is consistent with past practice.

What you have done is restated the plant cost and restated your income of recent years to be on a consistent basis under the capitalization theory.

Along that line I intended to make a statement—I intended to make it later but I might make it now. I don't know whether you folks intend to continue your present method of capitalizing overheads or not, I don't think your method is a particularly good one, I don't like it at all—

Q. (Interposing): I am interested in this, but I submit that it has no part in this rate case. A. Yes, it does, a very vital part.

Q. All right, go ahead. A. If you intend to change that method of allocating overheads for the future—and I think you may want to change it—I think, before this case is over, you ought to say so, so that proper recognition can be given to the change. If you are not going to capitalize

these overheads in the future, the items now included in overheads should be considered as expenses in prognosti-

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cating the expenses of the future. It is only in simple justice to you that I make that statement. I think you will want to change it some time, to be frank with you.

Q. I appreciate your comments, but you understand that we are not yet applying to the Commission for permission to set up our accounts in connection with the Code of Accounts, that we are just trying a rate case now. A. Well, I think your rate case and the way you keep your books, have got to be tied together. I think this business of keeping books in one way, and having extraneous figures or different figures in a rate case, is a horrible thing, and I can't condemn it too strongly.

Q. In other words, so far as you are concerned a rate case is just a question of accounting? A. No, I think you have an obligation to keep books right, and that those figures ought to have a real substantial meaning for rate case purposes.

Mr. Cockley: I move that that be stricken out; that certainly is not responsive to any question put to the witness.

Trial Examiner: Read the question, please.

(Whereupon the reporter read the pending question.)

Mr. Cockley: Now, I move to strike that answer as not responsive, and ask the witness to be directed to answer the question.

Trial Examiner: The motion is overruled. It seems to

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me that he has answered the question.

By Mr. Cockley:

Q. Well now, to get back to another question that I think is not controversial.

As a matter of fact, Mr. Smith, am I correct that ther isn't very much difference between you, in your Exhibit 5 and the Company's Exhibit 20, as to the ultimate fact namely, how much money was originally spent by the Com pany on these various accounts, how it was treated on th books as a matter of fact, and the whole question is whethe or not it is proper to include it in a statement of origina cost in a rate case; isn't that really it? A. That is substan tially correct.

Q. And am I further correct—would you admit this— that if the company's plant accounts were now to be state on the assumption that its books had always been kept i accordance with the present Uniform System of Account from the beginning, that Mr. Antonelli's statement o original cost would be substantially correct? A. Ther would be several million dollars of adjustments, but most o the $17,000,000 adjustment we are talking about would b added to the plant accounts. As an offset to that we woul naturally show a much higher depreciation reserve than w do show in one of our exhibits.

Q. Of course if we are talking about the original cos



of the property, the depreciation would not have to be re flected in it. A. That is right.

Q. But aside from a couple of million dollars, you thin perhaps his statement would be a correct statement of tha original cost if the books had been kept in accordance wit the present uniform system of accounts? A. That is cor rect. I still, for instance, have a good deal of qualificatio on overheads. I think the overheads were computed in pretty ready manner, and getting over-all relationships which I don't have any faith in myself.

Q. Well, the net result of it might be that you migh adjust that two or three million dollars downward—per haps a million or less? A. It would be several million dol lars, but the bulk of the $17,000,000 would be put into plan accounts.

Q. You wouldn't throw all the overheads out, you would recognize the propriety of whatever overheads had been charged? A. I don't know how in the world you could go back and establish it; I would rather Mr. Antonelli have that burden, than that I have it.

Q. I think you have already stated that the company has been consistent in its operating statements and in its rate base statements? A. That is true. I made an explanation at the time and I want my explanation to cover

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my present answer.

Q. Mr. Smith, the only other question I want to ask you is this—do you claim that the figure of $51,200,000 which you have arrived at, or which your staff has arrived at in Exhibit 57, is any evidence of the value of the Hope Company's plant devoted to public service at the present time? A. To the extent that valid cost to the company is an element of value, that is an element.

Q. Now is it evidence, on your theory, as to the value of all of the property devoted to public service on December 31, 1938, or only that part of the property that is shown in your exhibit? A. It is evidence, it is the real evidence of value of all the property except the distribution property.

Q. Of all the property? A. Yes, sir.

Q. Including the 2600 wells, the drilling costs of which are omitted? A. Absolutely.

Q. And including any physical property or other construction costs that have been omitted? A. As to physical property I don't think we have excluded anything except that which is normally charged to maintenance, and I certainly would exclude that.

Q. As a matter of fact you said you weren't familiar

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with the details of it and that I should ask someone else about it, but you have excluded some 9500 telephone poles with cross-arms, brackets and pins; and you have excluded

some 275 small buildings that were in there, and so on? A. I don't think we have, Mr. Cockley, but someone else can cover the details of that.

Q. But your view is that it is some evidence of the original cost and therefore some evidence of present value of all the property, and not merely of that part of the property that is included? A. That is right.

Q. And as of what date do you think this is evidence of value? A. As of December 31, 1938.

Q. You recognize, do you not, that you have in here costs incurred from the period 1898 down to 1938? A. That is correct.

Q. Forty years? A. That is correct.

Q. You recognize, do you not, that the price levels in that period have substantially changed? A. Yes, I recognize that; I recognize many other things also.

Q. And you recognize that the price level that prevailed prior to the first World War is about half the price

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level that has prevailed since that? A. No, I don't recognize that. I think we had better get a graph of prices if we are going into that. After the depression you know we went back I believe to the 1913 levels, so far as general prices are concerned.

Q. Do you really believe that as to the items that enter into the cost of a natural gas plant, do you think we went back to the 1913 levels in labor costs? A. I think that the gross cost, the original cost of these properties, was far higher than any conception of value as of 1938 on a strictly value basis, because the inexorable law operating is depreciation and depletion, there can be no question about that.

These properties, like all physical properties, are on the irresistible march to the junk heap. All physical property is in the same category. As they get older, depreciation occurs, and as you use up the gas, depletion occurs.

Those are the things, I think, which are of primary importance.

Q. Well, you started with this original cost and then you have taken all that off, haven't you? A. I think it ought to be taken off.

Q. Well, I understand— A. (Interposing): But were we talking about original cost only, in your question.

Q. Well, now, Mr. Smith, what I asked you was

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whether or not you believed that the labor prices prevailing in 1931 and 1932 were as low or lower, the ones entering into construction of a natural gas plant, than they were in 1913?

Mr. Springer: We don't have any evidence in this case on the trend, on the variation in labor prices, and if it weren't for the fact that this is in a field in which Mr. Smith has taken a great interest and a hobby, I would object; but I would be glad to have him answer it.

By Mr. Cockley:

Q. Just answer the one question? A. You can't answer the question categorically, Mr. Cockley, for this reason, that while the hourly rate of labor has gone up, the efficiency has improved, and I don't know whether the real wage, that is the real cost, has gone up or gone down. In some industries it has gone up and in some it has gone down. I don't know enough about the natural gas industry at this stage to say, other than that I have made some tests and I find that there has been a substantial increase in the labor efficiency in the case of the Hope Natural Gas Company.

Q. Is it your testimony that a laborer in West Virginia in 1932 or during the depression, or at any time since, could dig as many yards of dirt out of the ground as one in 1913? A. He could dig more. Let's change the date of 1913, take the period 1900 to 1913, and he would dig more in 1932.

—2818—

Mr. Cockley: That is all.

Trial Examiner: Does counsel for the City of Cleveland have any questions?

Mr. Reeder: No questions.

Trial Examiner: The City of Toledo?

Mr. Nathanson: No questions.

Trial Examiner: The Pennsylvania Commission?

Mr. Keenan: No questions.

Trial Examiner: The West Virginia Commission?

Mr. Goldsmith: No questions.

Trial Examiner: Is there any re-direct examination?

Mr. Springer: Yes.

RE-DIRECT EXAMINATION by Mr. Springer.

Q. If the management makes elections, Mr. Smith, under acceptable accounting principles, and expenses an item, should it later be permitted to capitalize that same item retroactively? A. No, sir.

Q. If such permission were granted, would there be any integrity to accounting? A. There would not be, in my opinion.

Q. If such permission were granted, could it not be possible that with every change of management there would be a retroactive revision of accounts?

Mr. Cockley: I object to that; there is no question

—2819—

here about changing accounting. I object to further questions based on the assumption that there is.

Mr. Springer: That happens to be the conflict here, on principles of accounting.

Mr. Cockley: No, it isn't, it is just your conception of it. We are not here asking for permission to change our accounts in any respect.

Mr. Springer: Only to capitalize $17,000,000 that were not formerly capitalized by the election of management under acceptable principles of accounting.

Mr. Cockley: We are not asking to do any such thing. All we did in the exhibit was to show the dollars we spent in drilling the 2600 wells, in addition to the 700 that were on our books.

Trial Examiner: I think I understand the position of counsel. Counsel for the company, of course, claims it is not in issue; and counsel for the Federal Power Commission claims that it is. Well, that makes it in issue, as far as I am concerned. The objection is overruled.

Mr. Springer: Will you please read the question?

(Whereupon the pending question was read by the reporter.)

The Witness: That would be perfectly possible.

By Mr. Springer:

Q. And would it be proper? A. It would not be proper.

—2820—

Q. Mr. Smith, is there a relation between the plant accounts and the income statement? A. There is a direct relationship.

Q. They are inseparable, aren't they? A. They are indeed.

Q. And you would get a distorted picture if you looked at only plant accounts without also considering the related income statement, that is, the treatment of income and expense, isn't that so? A. That is correct.

Q. If the company were permitted to capitalize retroactively items which it had formerly expensed, in a rate case, would not multiple charges against the consumers result?

Mr. Cockley: I object to that; it is just going over the same old ground again.

Mr. Springer: This is new ground.

Mr. Cockley: Oh, no, it isn't.

Trial Examiner: Why wasn't it gone into to begin with, on direct examination?

Mr. Springer: Mr. Cockley opened this up on cross examination, Mr. Examiner.

Mr. Cockley: No, I did[redacted]ss volunteered a statement.

Mr. Springer: It will on[redacted]ake me two more questions, Mr. Examiner.

—2821—

Mr. Cockley: Well, the question is just improper, whether it takes two more questions only, or not.

Trial Examiner: The objection is overruled; proceed.

The Witness: It would be purely a question of fact. If they are allowed as expenses and then put in plant and allowed again, of course there is duplication.

By Mr. Springer:

Q. There would be a return on the former items that were expensed if they were put into plant, isn't that so? A. Obviously if they are allowed both places, there is duplication.

Q. And in addition to that return on a capitalized former expense item, there would be an additional expense for depreciation, would there not? A. That is correct.

Q. Which makes three times the consumer pays for—

Mr. Cockley (Interposing): I object to that.

By Mr. Springer:

Q. In your definition of original cost, in your discussion of the principles of accounting, I believe you concluded that your idea of original cost is the same for accounting and for rate making purposes? A. That is correct.

Mr. Springer: That is all.

Trial Examiner: Is there any re-cross examination?

—2822—

Mr. Cockley: Yes.

RE-CROSS EXAMINATION by Mr. Cockley.

Q. When you were answering Mr. Springer you said that if items were allowed as operating expense, they shouldn't be subsequently capitalized. Do you mean "allowed" as a matter of making rates, or as a matter of bookkeeping for the company? A. I tried to make it clear that if they were allowed both places there would be duplication. If they are not allowed, regardless of how they are accounted for, there may not be duplication.

Q. You mean allowed in fixing rates? A. Yes, sir. I mean to say that if you allowed an item as expense in fixing rates, and later that is allowed as capital plant, on which a return and depreciation is allowed, there is duplication, it is obvious duplication.

Q. And you are confining your answer now to fixing rates? A. Yes, sir.

Mr. Cockley: That is all.

RE-DIRECT EXAMINATION by Mr. Springer.

Q. Well, you aren't confining your answer to fixing rates by a regulatory body, are you; I mean the management itself fixes rates, and has many times, before regulation—

Mr. Cockley (Interposing): I object to this argument

—2823—

with the witness; he isn't asking a question.

The Witness: I think that is the substance of my testimony this morning.

Mr. Cockley: After we have examined today's transcript we may have a few more questions of Mr. Smith, I don't know, but I would like to reserve that right if it proves necessary.

Trial Examiner: I presume there is no objection t that, is there?

Mr. Springer: No.

Trial Examiner: The hearing is recessed, to reconven tomorrow morning at 9:30 in the Commission's Hearin Room on the second floor of 1757 K Street, N. W., Wash ington, D. C.

(Whereupon, at 4:45 p. m., the hearing was recesse until 10 a. m., Wednesday, April 23, 1941.)

## 10. TESTIMONY OF COMMISSION WITNESS JOHN W. PACE AS TO DETERMINATION OF ADJUSTED BOOK COST, WEDNESDAY, APRIL 23, 1941, RECORD PAGES 2861-2863, 2871-2873, 2877-2893, 2895-2899, 2903-2911, 2941-2949, 2953-2957, 2964, 2972-2974.

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Whereupon, JOHN W. PACE, called as a witness on behalf of the Commission, being duly sworn was examined and testified as follows:

DIRECT EXAMINATION by Mr. Springer.

Q. Mr. Pace, will you state your full name and position, please? A. John W. Pace, senior examiner of accounts for the Federal Power Commission.

Q. Will you state your qualifications, please, starting with your education? A. I attended grade and high school in Terrell, Texas.

I attended the Metropolitan Business College in Dallas, Texas, where I completed a one-year accounting course.

I also attended a private school in Dallas, Texas, conducted by a chartered accountant, where I studied general accounting for five years.

My experience, in general, has been as follows:

In 1918 I was employed by the Texas Power and Light Company in the Accounting Department where my duties involved handling of cash receipts, consumers' ledgers and material and supplies records.

For the period 1919 to 1923 I was employed by the

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Middle West Utilities Company. I was employed first as assistant treasurer and district auditor of all the southwestern properties belonging to this company. Later, I was advanced to treasurer and general auditor. The duties in this position were supervision of all accounting and re-

sponsibility for all financial matters. The properties under my supervision consisted of 20 corporations, including gas, light, water, traction and ice companies.

In 1924 I was employed for a short time by H. M. Byllesby Engineering Corporation. My duties with this company were auditing gas properties located in Oklahoma and Arkansas.

From 1925 to 1935 I conducted my own commission business in Dallas, Texas. This business consisted principally of appraisals of city property, financing homes, and buying and selling of oil properties located in the East Texas oil fields.

From 1936 to 1941 I have been employed by the Federal Power Commission as an Examiner of Accounts.

Q. Mr. Pace, will you state briefly your responsibility in the preparation of the two-volume original cost work marked for identification as Exhibits 57 and 57-A? A. Well, I was directly in charge of all the detailed work in connection with assembling the figures in this report.

Q. Now referring to the written statements in this two-volume work, and the supporting schedules, if appropriate questions were presented to you, would your answers be, in



essence, and your direct testimony, that which is contained in the two-volume work? A. Yes, they would.

Mr. Springer: Mr. Examiner, I offer in evidence at this time the exhibits marked for identification as 57 and 57-A, being the original cost of gas plant as at December 31, 1938, for the Hope Natural Gas Company.

Mr. Cockley: I want to object to these exhibits as not being a statement of the original cost at all. If they are offered for that purpose, I object to them. If they are offered as an adjusted book cost, for whatever relevancy that would have, I will not object; but as an offer of original cost I object to them.

It has been proved beyond any controversy, by the admissions of the witness the other day, that the figure in here is an adjusted book cost.

Mr. Springer: It was also proved by Mr. Smith, on examination of his definition of original cost and the principles of accounting that applied in this case, that this two-volume work is precisely offered as the original cost of the Hope Company's properties as of December 31, 1938, and that is the purpose for which I offer it at this time.

Trial Examiner: Well, it seems to me that that is something which might well be taken up in the briefs. The objection is overruled.

* * * * *

CROSS EXAMINATION by Mr. Cockley.

* * * * *

—2871—

Q. Now your schedule 1 on page 10 is the final summation of all these new plant accounts you are going to set up for the Hope Company, is that right? A. Yes, sir.

Q. Which are taken into the original cost? A. Yes, sir.

Q. I don't know that it is necessary to go over it again because Mr. Smith was over it yesterday, but isn't it a fact that what you did was to start with these various accounts as re-stated, start with the cost shown on the company's books, in column (d), and recognize the reclassification insofar as it was proper by the company, in columns (e) and (f), and arrive at a cost per books that merely reclassified these accounts? A. That was our starting point, yes.

Q. And the dollars in the reclassified book costs are just the same as the dollars in the book costs as set up originally? A. Yes, sir.

Q. That was just transferred from one account to another, all of them being shown on your page here, is that not so? A. Yes, sir.

—2872—

Q. And then you made adjustments both up and down in those, for various reasons, and arrived at a figure that is an adjustment of that book cost, shown in column (d), is that not so? A. In one sense, yes. However, we of course know that that is not on the company's books, it is what we have determined as being the actual cost.

Q. Well, now, Mr. Pace, did you listen carefully to my question? I did not suggest, did I, that the $51,207,000 is on the company's books. There isn't any doubt, is there, but that what is recorded on the company's books at the present time is $53,[illegible]06,000-odd, is that not so? A. That is correct.

Q. And your $51,000,000 is an adjustment that you have made of that figure of $53,300,000, is it not?

Mr. Springer: Would it be more understandable to him if you said net adjustment?

Mr. Cockley: I don't know, if he wants to say it was a net adjustment—

Mr. Springer: (Interposing) Of course there were additions and deductions in the adjustment.

Mr. Cockley: Of course.

The Witness: And that is the result of the net adjustments to those book figures.

—2873—

By Mr. Cockley:

Q. And am I further correct that all the subsequent schedules appearing in the rest of volume 1, and all that appear in volume 2, are merely supporting details for that figure? A. Yes, sir.

Q. And do you agree—I assume you do—with the statement made by Mr. Smith yesterday, that where you have used in here, investment in gas plant "per books," and at other places have used "book cost" or, as you do on schedule 2, "capitalized cost per books," that those

all mean the same thing and in total refer to the item of $53,307,000? A. Yes, sir, that is correct.

Q. And where you use those same expressions and say "as adjusted," they mean the total of $51,207,000? A. That is correct.

* * * * *

—2877—

Q. Well, regardless of the reasons, the fact is that you didn't make any investigation of the work orders, or any

—2878—

analysis of the work orders and the vouchers and the records of the prior utility, where they were available, to try to find out how much money the company drilling those wells had actually spent for drilling them, is that not so? A. No, sir, we didn't try to determine how much money they spent in drilling wells.

Q. And you did not at any time attempt to make any estimates of the amount they originally spent for drilling those wells, did you? A. No, sir, we don't go by estimates.

Q. What? A. We don't go by estimates.

Q. And you didn't go by estimates at any time in this so-called original cost study, did you? A. Not by estimates, no, sir.

Q. And you threw out every estimate that had been made of original cost where it couldn't be accurately determined from an analysis of vouchers and work orders and other records, is that not so? A. I don't think that we threw them all out, in the case of the prior utility acquisitions.

Q. Will you prepare for me a list of them that you didn't throw out? A. Well, I think most of the amounts that are recorded as prior utility costs were arrived at by estimates.

—2879—

Q. What is that? A. I think most of the amounts that are recorded as prior utility acquisitions, represent

estimates, and were estimated at the time the acquisition was made, according to the inventories that are attached to those vouchers.

Q. Were estimated at the time the acquisition was made? A. Yes.

Q. You mean 50 per cent of them or more, is that what you mean by "most of them"? A. Well, I would say more than that, because the vouchers that I examined all had an inventory attached to them, and from the notations shown thereon would indicate that all of them were estimated with the exception, maybe, of the Clarksburg Light & Heat.

Q. You are talking now about the vouchers of the Hope Company, are you not? A. Yes, sir.

Q. My point is that you did not analyze or attempt to analyze any of the vouchers, work orders or other records or data, of the utility that first devoted that property to public service, and from whom Hope purchased it as utility property, is that not so? A. We made an attempt to examine some of their records, but there were so few of them submitted to us that it was useless, so we gave up.

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Q. Well now, Mr. Pace, do you say that there wasn't submitted to you every record which the Hope Company had or could obtain, in its possession; and if there were records that they had or could obtain, and didn't submit them, will you tell me what they were? A. I didn't say that, I think they submitted to us all they had, but I don't think they ever had them.

Q. And in the absence of those vouchers of the company first devoting the property to public service, did you make any estimates at all as to the drilling costs or other costs? A. No, sir.

Q. Or as to the amount of money properly spent by those companies in acquiring that utility property, or in constructing it? A. No, sir, we accepted the company's estimate.

Q. Well, what you mean is that you accepted the figures that appeared on the Hope Company's books or records? A. Yes, sir.

Q. And in the case of well construction that was zero because they had no estimate? A. That is right.

Q. In the original records? A. That is right.

Q. And what I am asking you is that you did not at any time attempt to go back and determine the cost to the

—2881—

utility first devoting that property to public service, did you? A. No, sir. There is one exception there, that they did show well drilling cost in the acquisitions, and I think that was in the amount of approximately $160,000 which the Hope Company expensed at the time of acquisition. They did not put it in plant accounts.

Q. What did you do with it? A. We left it right there.

Q. By "leaving it right there," you mean you didn't put it in plant accounts either?. A. No, sir, we left it right there in expense.

Q. Let me see if I understand what you have just said. You have said that although the plant accounts of the utility that first devoted that property to public service showed the drilling expense for those wells acquired by Hope of $160,000, when Hope acquired it, it charged that to expense, and you did not restore it—do I misunderstand you or is that what you said? A. I don't believe I said that the vendor reflected that in their plant accounts. That amount was included in the purchase price of that property. Now whether it was reflected on the vendor's books in plant accounts or expense accounts, I don't know, but it was considered in the purchase of the property and was charged to expense in the Hope books.

Q. Well, the truth is that you didn't investigate the

—2882—

plant accounts of the company first devoting that to public service, to see whether to charge it to expense or whether to capitalize it, did you? A. I don't think those books were available.

Q. And in the absence of their availability, you made no estimate of it? A. No, sir.

Q. And your statement is, as I understand it, that Hope paid $160,000 on account of those drilling costs? A. In one particular case they did.

Q. In one particular case? A. Yes, sir.

Q. But that you did not include it in your statement of original cost because Hope subsequently charged that to operating expense instead of to capital account, is that right? A. Yes, sir, that is correct.

Q. You did not, in any case, consider it necessary to apply Instruction 2(C) of the Code of Accounts which you were following which states:

> "Detailed gas plant accounts 301 to 390 inclusive shall be stated on the basis of cost to the utility of plant constructed by it and the original cost estimated if not known, of plant acquired as an operating unit or system."

Is that right? A. We considered that instruction, of

—2883—

course, in determining our cost, but I don't believe that the instruction ever intended the accountants to do any estimating.

Q. Well, your view is that that contemplated that the engineers would make the estimate and furnish it to the accountants, is that it? A. No, my understanding is that it is up to the company to make the estimate and submit it to us.

Q. Well, isn't that exactly what Mr. Antonelli did? A. Well, of course in that one particular case we are discussing, I don't think he made any estimate there. I don't think it was necessary.

Q. Well, as a matter of fact, didn't he make estimates wherever he couldn't, from original records, analysis of original records and vouchers, find the actual dollars paid; didn't he make some estimates, where necessary, of drilling costs? A. Yes, sir.

Q. Didn't he make some estimates of overheads? A. Yes, sir.

Q. Aren't they all contained in Exhibit 20? A. Yes, sir.

Q. And wasn't that submitted to you and before you when you made this? A. Yes, sir.

Q. But you didn't either accept any of those estimates or check them, or use them in any way, did you? A. No, sir.



Q. Did your engineers in the Commission ever furnish you with an estimate of any kind, of any of those items? A. They didn't supply us with an estimate of those items, no, sir.

Q. Well, of any items that entered into this $51,200,000 you arrived at? A. I don't believe that there is anything in that, which represents estimates, no, sir.

Q. Did you ever request any of your engineers to give you an estimate of drilling costs or overheads, or any other items, the exact amount paid for which you could not determine from an analysis of the records of the company constructing that property? A. I don't believe that we did.

Q. Well, you know you didn't, don't you? A. Not that I remember of, at the present time; I don't think that we did, no, sir.

Q. Now as a matter of fact, as to these well accounts, Mr. Antonelli had determined the amount of dollars actually expended by the company first devoting this to public service, whether it was the Hope Company or a predecessor company, in the great bulk of those cases, had he not, and estimated it only in a relatively small number, compared to the entire item? A. Yes, sir.

—2885—

Q. Now let's come to the wells drilled by the Hope Company itself, and distinguished from those it purchased.

—2886—

To shorten this, isn't it a fact that as to all money spent by the Hope Company prior to 1923, which was not capitalized in its plant accounts, and represented the construction cost of wells drilled by it, you did not include any of that in your statement of original cost, did you? A. No, sir, we did not.

Q. It is not included in the $51,200,000? A. No, sir.

Q. Did you make any check of Mr. Antonelli's statement of original cost of drilling Hope's own wells, to see whether or not his statement of original cost was correct or not, his statement of the money spent in drilling those wells was correct or not? A. We checked a large part of it. I don't know whether we checked every bit of the well drilling costs or not, but we did check quite a number of wells.

Q. And you found his costs, as stated, to be correct in those cases? A. Yes, I think in most all cases it was exact.

Q. He had, for practically all of the Hope's own drilled wells, the original work order, did he not? A. Yes, sir.

Q. And the vouchers? A. Yes, sir.

Q. Which would show exactly how much money was

—2887—

spent for well equipment and how much for well drilling, and what it was, and all about it; didn't he? A. He had the records that were in support of the charges on the various work orders. Just how far in detail they went, I couldn't say from memory.

Q. So that you knew that the company had spent the dollars that he showed, when they originally drilled the wells of the Hope Company, did you not? A. Yes, I think that is right.

Q. Now in this Account 332.1, will you tell me how many wells were included in the inventory, including both those purchased by Hope Company from any source, and those drilled by the Hope Company? A. The total number of wells?

Q. Yes. A. At December 31, 1938?

Q. Yes. A. I think it was approximately 3300 or 3400.

Q. Approximately 3300, wasn't it? A. Something like that, yes, sir, approximately.

Q. And those wells were all in use, or were connected with the system on December 31, 1938, and were accepted in the inventories of the property, were they not? A. Yes, sir.

Q. Now in your Account 332.2, which is right below,

—2888—

the well equipment account, will you tell me how many wells are included in that account? A. The equipment?

Q. The equipment account—that includes 3300, all of them, doesn't it? A. That includes all the wells in service.

Q. Will you tell me how many wells are included in the item right above it of 4,000,000-odd dollars, which you set up for the well construction account? A. I believe it was 772.

Q. Less than 800 of the 3300 wells you show in your so-called original cost the amount spent for drilling them, is that right? A. Yes, sir.

Q. Stated the other way, there are nearly 2600 wells for which your figure contains not a dollar for drilling costs, isn't that a fact? A. Yes, sir, that is correct.

Q. And for all of the 2600 wells, or approximately that, that were omitted, that were drilled by the Hope Company, at least, you had available a perfectly accurate record of the amount of dollars the company had spent in drilling or constructing those wells, did you not? A. Yes, I think so: We didn't examine all of them.

Q. And if you had been instructed to include in your

—2889—

figures the actual amount of money that the company first devoting this property to public service had spent in drilling and constructing these wells, you would have had, in your adjusted figure on the right-hand column (J), page 10, substantially the same amount as Mr. Antonelli, would you not?

Mr. Springer: I object. His instructions didn't encompass that, as has been testified to by Mr. Smith and by himself, and why put a hypothetical question to this witness? He hasn't testified to the accounting principles. Mr. Smith is the expert on accounting principles.

Mr. Cockley: Well, of course this question goes to the accuracy of the figures. I want to see if there is any dispute about Mr. Antonelli's figures. This is the man that I have understood is responsible for the figures and who has checked them, and knows whether they are right. What I have said to him is, if he were setting it up on the same theory as Mr. Antonelli, if he wouldn't have had substantially the same figure that Mr. Antonelli had.

It is a perfectly proper question.

Trial Examiner: The objection is overruled.

The Witness: Please read the question.

(The question was read by the reporter.)

By Mr. Cockley:

Q. Well, perhaps that isn't a fair way to ask it. I will change it to read this way:

—2890—

If you had been instructed to do what I have said in that question, you would have had, for Account 332.1, substantially the same figure as he had, would you not? A. Yes, sir, our figures would probably have been the same. I think his figures are correct.

Q. I mean, you don't make much question about the accuracy of his figures? A. No, sir, I don't.

Q. The whole dispute is the question of whether or not they are a part of the original cost or whether they are not, is that right? A. Yes, sir.

Q. Thank you.

Now in various of these accounts—I will not take you through them in detail—but there were overheads that Mr. Antonelli, or for which Mr. Antonelli did not have original records, and for which he made estimates, is that not so? A. Yes, sir.

Q. And he has included them in his figures, and you have not included them in any of yours? A. That is correct.

Q. Now I suppose there would be no dispute that a proper amount of overheads is necessary and is permissible to be added to the direct cost of materials and labor, and capitalized in the account, is that not so? A. Well, our

—2891—

system of accounts provides for a reasonable amount to be attached to cost so long as it is in accordance with good accounting.

Q. Did you make any estimates at all of overheads to be applied, properly applied, to these various accounts? A. No, sir.

Q. So that you didn't form any opinion, one way or the other, as to whether Mr. Antonelli's overheads were reasonable or not, his estimate of overheads were reasonable or not? A. Well, we did form some opinion in that respect inasmuch as we wouldn't agree with certain amounts that he excluded from his estimates.

Q. You wouldn't agree to certain amounts that he excluded from his estimates? A. Yes, in arriving at his ratios. I mean, certain amounts that he has excluded from his total expense in order to arrive at the ratio of the amount to be charged to construction.

Q. Well, just where was your difference with him, what did you investigate and what use did you make of overheads? A. Well, we didn't make any estimates; we merely made a check of what he shows here in his Exhibit 20, and in that respect we couldn't agree with him in some of his figures.

Q. Well, what do you think he excluded that he should

—2892—

not have excluded? A. Well, in arriving at his ratio between the operating expense and construction cost, he excluded from his operating expense gas purchased for resale; gas used for compressor station operations; depreciation and amortization items; and taxes other than payroll taxes—these items were excluded from the total expenditures that the overheads were applicable to, which states that they were applicable to all operating expense with the following exceptions that I have just read, plus the total gross additions to investment.

I don't know that we would agree altogether with that basis of distribution of those costs.

Q. Well, what basis would you take? A. Well, it seems to me that part of the overhead costs should apply to the items that he has excluded. There probably wouldn't be a great deal of difference, but then there would be some.

Q. Well, how much difference would it make in the percentage; what percentage did he arrive at finally? A. Well, this page is full of them, I don't know which one you have reference to.

Q. Well, what was the over-all picture, or which one do you think ought to be changed? A. I don't believe there is an over-all percentage shown on this page, it is broken down between general overheads, purchasing, land,

—2893—

payroll, and so forth, and each one of them shows individual ratios.

Q. And which one would you change? A. Well, it would probably, to a certain extent, change all of them. I don't know just how much it would change them, because we didn't figure that.

Q. That is the only criticism you have to offer of his estimates of the amounts to be excluded from current expenses for construction overheads, is that right? A. Well, that is the only criticism I have as to his estimate as he made it.

Q. And would the amount you exclude be more or less than he excluded? Are you able to say? A. It would be less, I think.

Q. That is, you think more ought to be included in operating expenses, and less capitalized, is that it? A. It would have that effect, yes, sir.

Q. But you can't say how much less, if any? A. No, I couldn't give you figures.

Q. And on this whole picture, it would make almost no difference at all, would it? A. Well, I don't know just to what extent it would go. I should say that the gas purchase would probably amount to a considerable difference, if it was included.

* * * * *

—2895—

Q. Well, you think, do you, that $8,000,000 spent for the purchase of gas under these permanent contracts, that every one of those dollars requires as much supervision as it does for dollars spent for labor, for example, in the course of a year? A. Well, I don't know that it would require altogether as much supervision.

Q. Well, you know it wouldn't, don't you? A. I don't believe it would, no, sir, to be frank.

Q. It would be an infinitesimal fraction as much, would it not? A. It probably would, yes, sir.

Q. And if you made your complete adjustments that you are talking about, you wouldn't substantially change

Mr. Antonelli's figure, isn't that a fact, his percentages? A. Well, I couldn't say, I made no attempt—

Trial Examiner: (Interposing) I am not sure that I understand the relationship between the direct testimony of this witness and Mr. Antonelli's figures. Are these figures in columns (e) and (f), headed "reclassification by company," supposed to be Mr. Antonelli's reclassifications and

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adjustments?

The Witness: Yes, sir, in columns (e) and (f), those figures were determined by Mr. Antonelli.

Trial Examiner: But your adjustments were not based on Mr. Antonelli's adjustments, were they, or on the figures he got after those adjustments?

The Witness: Well, Mr. Antonelli's figures, shown in columns (e) and (f), merely represent a reclassification of the number of dollars that were shown on the books—

Trial Examiner: (Interposing) What I am trying to get at is whether or not you analyzed all Mr. Antonelli's figures to determine whether they were correct or not, and just what bearing that would have on your adjustments?

The Witness: Yes, sir, we examined every one of Mr. Antonelli's adjustments in detail.

Trial Examiner: And you took the results of that investigation into account in making your adjustments?

The Witness: Yes, sir.

By Mr. Cockley:

Q. Well, as a matter of fact, what you did here is merely to accept his adjustments insofar as you approved them, and you eliminated all others, isn't that right? A. Yes, sir; we did examine them, though.

Q. Yes. And you checked and spot-checked them very

—2897—

carefully, didn't you? A. Very carefully.

Q. But your exhibit nowhere shows the items that are included in Mr. Antonelli's adjustments, which you have not accepted, in any way,—or as I would put it, ignored; isn't that right? A. No, sir, it doesn't show them at all.

Q. You have taken merely the part of it that you were willing to accept? A. Yes, sir.

Q. Well, so far as these overheads are concerned, the reason you rejected them wasn't that they were too high, was it, or too low? A. No, sir, it was not.

Q. If you had agreed with them right to the penny, you still wouldn't have added them to your figures in any way, would you? A. No, sir.

Q. Now I want to hand you, Mr. Pace, a paper that I am going to have marked Exhibit No. 59 for identification.

Trial Examiner: It may be so marked.

(The document referred to was marked Exhibit No. 59 for identification.)

By Mr. Cockley:

Q. Now, Mr. Pace, this paper which I have had marked for identification as Exhibit No. 59, attempts to set up on



statement 1 here, the original cost as shown in Exhibit 20 of Mr. Antonelli, in the first column of figures, and your adjusted book cost as shown in Exhibit 57-A, and I direct your attention there to Account 332.1, which is the account we have just been discussing, is it not? A. Yes, sir.

Q. And the difference shown of $13,694,000, is in part the drilling cost of wells drilled by the Hope Company, and in part the cost of drilling wells of other utilities purchased by the Hope Company? A. Yes, sir.

Q. And in part overheads? A. Yes, sir.

Q. Is that not so? A. Yes.

Q. We would be glad to have you check these figures, all of them, and if you find any error in them, to have you

report that, because we want an accurate comparison in the record.

Now am I correct, then, that practically all the problems you had in connection with this were where you disagreed in principle with what occurred in that well-drilling account? A. Yes, I think that is the majority of the difference.

Q. I don't mean by that to say that there weren't disputed items in other accounts, but that account illustrates the three things that I have discussed with you where, in

—2899—

principle, you were not in agreement, doesn't it? A. Yes, sir.

* * * * *

—2903—

Q. No, I am talking about this $120,000 of labor that you say you disallowed because they were estimates, and you didn't know how they were made, and I am asking you if it isn't a fact that these represented construction costs and labor costs of lines for which there was no labor cost recorded in plant accounts, so that you know they are other lines, and of course you know they got into the ground in

—2904—

some way, don't you? A. Yes, but that still wouldn't keep me from thinking that there might be a possibility of improper distribution of labor.

Q. Well, it is true that you don't just know now why you did turn it down, isn't that a fact? A. Because I didn't think it was properly supported, it was estimated and I wasn't convinced that the expenditures were made.

Q. And when you came to an item that you didn't think was properly supported, was an estimate, and so on, you didn't go out and determine what the right estimate for that was, did you? A. No, sir.

Q. You just turned it down and didn't use it, isn't that a fact? A. That is right.

Q. As to all the estimates that were submitted to you by Mr. Antonelli, in this account and others, did you have an engineer review those estimates to see whether they were proper or not? A. I didn't, no, sir.

Q. As far as you know, nobody on the Commission's staff reviewed them to see whether they were proper, no engineer? A. Not that I know of myself.

—2905—

Q. At any rate, if they did, they didn't report to you about it, and they are not reflected in any way in your figures, are they? A. No, sir.

Q. Well, you didn't assume to review an engineering estimate yourself and arrive at an opinion as to whether it was proper or not, did you? A. No, sir.

Q. Now, Mr. Pace, I direct your attention to the next group of accounts known as Transmission Plant. I am correct, am I not, that the only sizable items of difference there are $284,000 for compressor station structures; $1,048,000 for mains, which is transmission mains; and $629,000, which is compressor station equipment—is that right? A. Those are the three principal amounts.

Q. And two of those three items relate to compressor stations, and the other, transmission mains. That represents practically all the money in that group of accounts, doesn't it? A. Yes, sir, that is correct.

Q. Am I correct that we have already discussed the principles that you applied in determining your figures on all of those items? A. Yes, sir.

Q. That is, these differences would be due to direct

—2906—

material and labor costs omitted, or for which no records were available and estimates were made; and overheads, would they not? A. Yes, sir.

Q. Now I direct your attention to the second statement that appears in this exhibit, and we would be glad to have you check it, and I want to say to you, so as to save

time, that here is set out, in paragraph (a), the direct material and labor cost, the differences, I will say, between Mr. Antonelli's exhibit and yours, which consist of direct material and labor costs which you did not allow because they were not capitalized, or because they were estimated—$14,023,000.

The next item is $679,000, which you transferred to utility plant in service. Now am I right that that item consisted of unoperated leases and some wells, that it consisted almost entirely of those two items, which you transferred out of the utility plant account? A. I don't believe it was transferred entirely out of the plant accounts; it was probably transferred out of the plant in service account.

Q. That is what I meant to say.

So that it would still appear, if the books were set up the way you think they ought to be, it would still appear on the books of the company? A. Yes.

—2907—

Q. And it isn't a disallowance; it is merely setting it aside for a particular reason, is it not? A. Yes.

Q. It is the other items that make the real difference between you, isn't it? A. Yes.

Q. But this $679,000 is not shown in your $51,000,000 figure, is it? A. No, sir, that isn't included in the $51,000,000.

Q. And it is in Mr. Antonelli's figure of $70,000,000, isn't it? A. Yes, sir.

Q. Then follows there the overheads and the Interest During Construction, which is also at some times considered a type of overhead, isn't it? A. Yes, sir.

Q. And the reasons why you have eliminated each of these groups are shown—I would be glad to have you check this and tell me if this is a correct statement, and Mr. Antonelli's work figures on it are available.

Now I direct your attention to Statement No. 3, which is, in turn, a classification and break-down of the $14,000,

000 item of direct material and labor costs, and I will be glad to have you make such check of this as you care to and report, if it isn't accurate.

—2908—

But for present purposes, assume it is accurate, and I will ask you if it isn't a fact that the items of property or costs for the construction of property, shown on that page, are not of property that was included in the inventory as of December 31, 1938? A. They are included in Mr. Antonelli's statement.

Q. Well, it is included in the inventory of the Hope Company's property, isn't it? A. Yes, sir, I assume that it is, I didn't check that inventory.

Q. And that inventory was checked and accepted, and it is the one from which you worked also, isn't it, or didn't you pay any attention to the inventory? A. I didn't check it myself.

Q. I didn't ask you about checking it, but did you use it? A. In a manner, yes. It is reflected in the detailed original cost study.

Q. Tell me this,—go to item (f), this well construction account—the 2633 wells, the drilling cost of which is omitted in your statement—those wells were all in the inventory, weren't they? A. Yes, sir.

Q. There is no doubt about that, is there? A. I don't think there is, no, sir.

—2909—

Q. Take the next item of 803,000, the construction costs for 803,000 feet of pipe, ranging in size from 1-inch to 20-inch. That pipe was in the inventory, wasn't it? A. Yes, sir. Mr. Antonelli shows it in his inventory.

Q. For my purposes, assume it was in the inventory, and if you have any doubt about it, check it and report; but now, as a matter of fact, that in its entirety represents money paid by the company first devoting this property to public service for the construction of that property, which

is not reflected in your Exhibit 57-A; isn't that so? A. Those amounts are not reflected in my exhibit.

Q. That is right,—not even to the extent of a dollar, are they? A. No, sir.

Q. And the fact is that your exhibit does not include the money originally paid, for example, in constructing 275 buildings ranging in size from 4' 2" x 5' 6" x 7' 5" to 30' 4" x 20' 6" x 7' 7"? A. It might include that, yes, sir.

Q. What is that? A. It might include that cost, yes, sir.

Q. You think your figures do include that cost? A. I said they might.

Q. Will you check that, and at a later time report to me whether you have a single dollar in there for the con-



struction of the warehouses, barns, garages, blacksmith shop, and so on, that are listed there? A. I am afraid that would take another two years to do that.

Q. Mr. Antonelli's work sheets are available, and it won't take you long to check. A. I think it is quite possible that those figures are in our cost figures at the present time. That, again, is a matter of improper distribution of costs.

Q. What do you mean by improper distribution of costs? A. Well, you build a compressor station there and you build one of these little garages or something around it, and whether the labor is buried in the cost of that compressor station or whether it is properly allocated to that little bitty house out in the back yard, I couldn't say. I say it is possible for it to be in there.

Q. Well, your theory is that if you build a garage 30 x 20, and for some reason or other the cost of the materials and the cost of the labor and everything else that goes into that garage originally are not shown in plant accounts, it should be excluded from a consideration of the amount of money actually spent in the first instance for it? A. I

should be included in plant accounts, but the proper cost should be allocated to it at the time it was constructed. As I understand this, Mr. Antonelli has inventoried these

—2911—

buildings and now claims that he finds no costs in the company's records to cover those buildings, which I say doesn't mean that the costs are not, in some manner, already recorded in the plant accounts.

Q. And did you investigate and find out how much they were in the plant accounts at? A. No, that would be practically impossible for us to do.

Q. Well, if it was impossible to do it from an investigation of the books and the vouchers and an analysis of them, did you make any estimate of it? A. No, sir, we didn't make any estimate; it would be practically impossible.

Q. You just didn't put it in, is that right, either by way of estimate or by way of exact ascertainment? A. No, sir, we didn't include it at all.

Q. And the same thing is true of every single one of the items that are listed on this page? A. None of those costs are included in our $51,207,000.

Trial Examiner: The hearing is recessed, to reconvene at 2 o'clock.

(Whereupon, at 12:30 o'clock p. m., a recess was taken until 2 o'clock p. m., of the same day.)

* * * * *

—2941—

Q. Now, coming back to the first page of this Exhibit 57, the middle paragraph says: "Volume 1 sets forth the investment of Hope Natural Gas Company in gas plant per company books as adjusted at December 31, 1938." I think we developed before that what you mean by investment of the Hope Natural Gas Company in gas plant per company books is the $51,200,000 we have mentioned; is that right? A. No, sir, the $53,000,000.

Q. I am sorry. It is the $53,000,000, which, as adjusted, means the $51,200,000? A. That is correct.

Q. Then you say the adjusted figure—you are there talking about the adjusted figure of $51,200,000? A. Yes.

Q. You say the adjusted figure developed in that way shows the original cost as defined in Federal Power Commission's Uniform System of Accounts for Natural Gas Companies of a gas plant. I suppose that still refers to the

—2942—

same figure, does it not? A. Yes, sir.

Q. It is now called an original cost as defined in the Federal Power Commission's Uniform System of Accounts; is that right? A. Yes, sir.

Q. And that is all you mean when you put it on the front cover "Original cost of gas plant as at December 31, 1938"? A. Yes, sir, we are accepting that as the original cost.

Q. It is a different name for the same figure; is that right? A. It is the original cost. That is what we have determined as original cost of the plant, regardless of what it is called.

Q. Then, what you have determined is in accordance with your interpretation of the Uniform System of Accounts? A. Yes, sir.

Q. And that is all it is? A. Yes, sir.

Q. Now, Mr. Pace, it is perfectly clear, is it not, that that figure is not intended by you to be a statement of all of the dollars that were spent by the Hope Company and other persons who first constructed the property shown in

—2943—

this inventory and devoted it to public service at the time it was so constructed? A. It does not, of course, represent every dollar of cost that was spent, but it does represent all of the dollars of cost that we consider as the real original cost of the property.

Q. What you mean by that is, it represents all of the dollars that the companies at the time charged up on their plant accounts? A. We think it represents all of the costs that were put into plant accounts then or at any other time.

Q. Let us avoid the word "cost" because Mr. Smith told us the other day that it had various meanings. A. I said cost in plant accounts.

Q. Is it not a fact that if you had been turned loose and asked, regardless of the Uniform System of Accounts and regardless of interpretation of that, to determine the amount of dollars actually spent for construction of property of the Hope Company by the company first devoting it to public service, that you would have had many millions of dollars more than shown in this exhibit; there can not be any doubt about that, can there? A. If I had to total the number of dollars spent without determining where the cost was—

—2944—

Q. Properly spent, I mean, of course.

Mr. Springer: Permit him to finish his answer.

Mr. Cockley: I thought he had.

The Witness: If it was just a matter of totaling up the number of dollars spent, I would probably come out with a lot more dollars, but I do not see that would change our figures as far as plant accounts are concerned.

Q. Did you understand my question to include dollars properly spent, necessarily spent in the construction and for property in use on December 31, 1938? A. I still say if we were just instructed to total up the number of dollars spent, we would probably have a larger figure than shown here, but that is without showing any distinction as to where the cost should be shown.

Q. Well, if without reference to how the books were kept over the years you had been told to go back to the original vouchers and the original records as far as you could and to make estimates where you could not get them,

but to come in, in the end, with the dollars actually paid by the company first devoting this utility property to service, you would have had substantially Mr. Antonelli's figure, would you not? A. May I have the question again?

Mr. Springer: I object. This witness has testified to volumes 1 and 2, Exhibits 57 and 57-A, original cost, and

—2945—

states that in his opinion that was the only valid original cost for the Hope Company property. He has not done anything of the kind Mr. Cockley has asked him to assume. He has said the original cost depends upon the principles of accounting by the company in the past, and since under the accepted principles of accounting some goes into operating expenses and some is capitalized, you get a different answer, and I do not think it is a proper question to put to Mr. Pace.

Trial Examiner: You summarize in a general way his testimony, but I do not know that I get the objection. Do I understand that the witness is to assume that this calculation or determination which he makes will conform to the Uniform System of Accounts?

Mr. Cockley: Yes, he is to assume it conforms, if he wants to, but I am asking him if it is not a fact if he were sent out without any specific instructions as to how he is to go about it, but he was merely to determine the actual dollars spent in the construction of this utility property as it existed at December 31, 1938 at the time it was constructed, and properly spent by the company first devoting it to public service, if he would not have substantially the same amount shown by Mr. Antonelli in Exhibit No. 20.

Mr. Springer: But you have not included in this ques-

—2946—

tion he would have access to income statements as well as plant accounts.

Mr. Cockley: I do not have to include in my assumption something you think should be in the assumption.

Mr. Springer: You are asking him to ignore the other part of a Siamese twin; you are confining it to plant—

Mr. Cockley: I do not care to argue with you, Mr. Springer. I have asked a question and you have not made a legal objection to it.

Mr. Springer: I object to his asking Mr. Pace under an assumption that would call for a similar study that Mr. Antonelli made and which Mr. Pace has challenged here by putting in a different original cost statement showing the only valid original cost for Hope Natural Gas Company at the end of 1938.

Trial Examiner: I assume the witness as an accountant would know what he would have to do to make the determination. I do not understand that counsel has restricted him to any particular records of any kind. The objection is overruled.

Mr. Cockley: Will you read the question?

(Question read.)

—2947—

Trial Examiner: Read the question, please.

(Whereupon the reporter read the pending question.)

The Witness: Not for plant accounts, I wouldn't.

By Mr. Cockley:

Q. I didn't ask you anything about plant accounts. I am asking you to state the dollars actually and properly spent for property in existence on December 31, 1938; but at the time that property was first devoted to public service by the company constructing it? A. As far as total number of dollars is concerned, of course if I secured my information from the same records that he did—

Trial Examiner: (Interposing) And made the same estimates?

The Witness: Yes, and made the same estimates—I would probably come out with approximately the same number of dollars; but again I would say that I don't know

that we would be anything like close together so far as plant costs are concerned.

By Mr. Cockley:

Q. What do you mean by "plant costs"? A. He shows plant costs—

Q. (Interposing) That is a classification; but I am asking you what you mean by "plant costs"? A. The costs that are charged to plant in accordance with good accepted accounting principles.

Q. And it is only that part of the cost that is charged

—2948—

to plant that you have used, isn't it? A. Yes, sir.

Q. And the other part of the cost, like well drilling, that is drilling that was charged to expense, you haven't shown? A. No—in this case where it was expensed, I left it there.

Q. All right. In other words, you haven't any doubt, have you, that if you spend $5000 for drilling a well, and $5000 for equipping it, that the original cost of that well, the actual dollars spent for it, is $10,000; there is no doubt about that, is there? A. Not a bit.

Q. Now if subsequently the utility charges $5000 of that to expense and $5000 to plant account, you treat the cost of that well from there on as $5000, don't you? A. Yes.

Q. And as far as you are concerned the original cost changes the minute you put it on the books, from $10,000 to $5000, doesn't it? A. The original cost of plant account does.

Q. I am talking about the original cost of the well. A. The total number of dollars of course remains the same.

Q. And you didn't try in this case to go back and determine, in the case of any item of property, that total number of dollars originally spent, regardless of how it

—2949—

was charged, did you? A. No, sir.

Q. And I suppose you carry that distinction you have just made into the title here, and that when you say "Original Cost of Gas Plant" you mean by that the original cost of the gas plant account as distinguished from the property of the Hope Company for which those accounts stand, is that right? A. Yes, sir, that is the original cost of the gas plant as determined by the Federal Power Commission examiners.

Q. In other words, in the case of wells you have got the original cost of the well account set up rather than the original cost of drilling and equipping the wells themselves, haven't you? A. Well, this exhibit is only for the original cost of the amounts that are properly chargeable to gas plant.

Q. And not the original cost of the drilling and equipping of the wells, but only that part of the cost that is carried over to the gas plant accounts; isn't that right? A. It is the original cost as we determined it.

Trial Examiner: Does the City of Cleveland have any questions?

Mr. Reeder: One or two questions.

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—2953—

Re-Direct Examination by Mr. Springer.

Q. Mr. Pace, will you please refer to page 6 of Exhibit 57, and the last sentence on that page, "It is the opinion of the examiners that the amounts recorded at the

—2954—

time of acquisition represent the original cost as near as can be determined" is the logical result of your substitution of Hope's book figures for Mr. Antonelli's opinions and estimates, isn't it? A. Yes, sir.

Mr. Cockley: I object to that.

Mr. Springer: He has already answered it yes.

Mr. Cockley: All right.

By Mr. Springer:

Q. Mr. Pace, you are aware of the provision in the Natural Gas Act, aren't you, which provides in Section 8 (B) that the burden of proof is on the Hope Company to support claimed expenditures or any items questioned by the examiners of accounts?

Mr. Cockley: I object to that as a wholly improper question. It certainly is not true, as a matter of fact.

Trial Examiner: It doesn't mention the Hope Company, does it, Mr. Springer?

Mr. Springer: No, but it mentions natural gas companies, and Hope is a natural gas company.

Mr. Cockley: Let's be fair about this. We are not making an application to this Commission for an increase in rates, or anything else. We were asked, if not directed, to go ahead and put on our evidence first, and we did it, and did it with the express reservation that we were not thereby assuming any burden of proof. There is no burden of proof cast upon a company which is merely in defend-

—2955—

ing existing rates. If it asks for additional rates, yes, but when it is defending merely existing rates, it does not have any burden of proof, the burden is upon those who allege they are unreasonable and unfair, which is the City of Cleveland in this case.

I don't think it is a proper question to ask this witness in any event; what he knew or didn't know about the burden of proof is a matter of interpretation of the statute in this case.

Mr. Springer: Mr. Examiner, this is a provision of the Natural Gas Act and it is not confined to rate making; it covers specifically, Accounting.

Trial Examiner: Well, that is another question which might well be argued in the briefs. It seems to me that the question is not improper. The question asked the witness is as to whether he is acquainted with this provision in the Act. He isn't called on to interpret the Act or its practicability in the instant case. If counsel expects to go that far I think perhaps we have a different problem.

The objection is overruled.

Mr. Cockley: I would like to have the question read, please?

(Whereupon the reporter read the pending question.)

Trial Examiner: I understand you are willing to amend that to eliminate the use of the Hope Company's name?

Mr. Cockley: I withdraw my objection.

Mr. Springer: Well, any natural gas company, and make it a general provision.

—2956—

Trial Examiner: Of course there is no provision in the Act as you suggest, that is the point.

Mr. Cockley: I wasn't objecting on that ground, but of course the Examiner is perfectly right.

Mr. Springer: May I quote from Section 8 of the Natural Gas Act which is included in the forepart of the copy of the Federal Power Commission's Uniform System of Accounts, Exhibit 58 in this record:

> "The burden of proof to justify every accounting entry questioned by the Commission shall be on the person making, authorizing or requiring such entry, and the Commission may suspend a charge or credit pending submission of satisfactory proof in support thereof."

What I have done is paraphrase that in my question.

Trial Examiner: You are familiar with that provision are you, Mr. Pace?

The Witness: Yes, sir.

By Mr. Springer:

Q. Well, Mr. Pace, as a principle of accounting, when you audit any company's books you demand satisfactory proof that an expenditure has been made, don't you? A. Yes, sir.

Q. And you insist on documentary proof where it is

—2957—

available, don't you? A. Yes, sir.

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—2964—

Trial Examiner: Is there any re-cross examination of this witness?

Mr. Cockley: One or two questions.

RE-CROSS EXAMINATION by Mr. Cockley.

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—2972—

Q. Now your attention was directed to Section 8(A) of the Natural Gas Act which has a sentence in it that the burden of proof, to justify every accounting entry, shall be on the person making or authorizing or requiring such entry—and I think you said you knew that and were you instructed that that imposed upon the Hope Company the duty of supporting, by entries and vouchers, any entry that you might challenge in its accounts? A. I didn't have specific instructions in the case of the Hope Company, but we have always had instructions to carry out those—

—2973—

Q. (Interposing) That is your general instruction? A. That is my general instruction.

Q. And you felt perfectly free in this case, as applied to the Hope Company, when you came to an item which you questioned, to have the company produce its records on it, and if you were not satisfied with the records or the esti-

mate or whatever it was, you felt perfectly free to disregard it, and just because the company hadn't produced as much evidence as you thought it should have produced: is that right? A. That is correct.

Q. And it is your understanding that this Section that I have read to you is applicable to a respondent whose rates are challenged, as the Hope Company's rates are, in this kind of a case? A. That is my understanding.

Q. And it is applicable to the investigation that you conducted, is that right? A. That is my understanding.

Q. And this exhibit was prepared in part on that assumption, was it? A. Yes, sir.

Q. It was prepared throughout on that assumption, but I suppose you didn't have to apply this rule to every

—2974—

item, did you, Mr. Pace? A. No, not quite.

Mr. Cockley: That is all.

## 11. TESTIMONY OF COMPANY WITNESS PETER ANTONELLI AS TO ORIGINAL COST OF PROPERTIES ACQUIRED FROM PRIOR UTILITIES, MONDAY, JULY 7, 1941, RECORD PAGES 5042 TO 5049.

—5042—

By Mr. Milde:

* * * * *

Q. Have you read the testimony of Mr. Pace on the subject of original cost as he defines it? A. Yes, sir.

Q. Do you recall Mr. Pace's statement that the Hope Company made estimates of the original cost to acquire utility properties at the time it purchased them? A. Yes, sir, I do.

Q. Do you further recall that Mr. Pace referred to the acquisition of the Fayette County Gas Company and the Flaggy Meadow Gas Company properties? A. Yes, sir, I recall that.

Q. And specified Voucher Nos. G-353 in 1910 and M-44 in 1902 as showing that such estimates had been made? A. Yes, sir.

Q. Do you have before you the Hope Company's vouchers pertaining to the Fayette County Gas Company

—5043—

acquisition to which Mr. Pace referred? A. I will get them.

Q. Do you now have those vouchers before you, Mr. Antonelli? A. Yes, I do.

Q. How many vouchers were involved in this Fayette County Gas Company acquisition? A. Two vouchers.

Q. Where are they, or what are their numbers, rather? A. One is E-95, 1910; and the other is G-353, 1910.

Q. What does Voucher E-95 show? A. Voucher E-95 shows the amount of money that Hope Natural Gas Company paid Fayette for the properties that they purchased in 1910.

Q. How much was that? A. $600,000.

Q. What else does it show? A. On its face it bears the written receipt of the Fayette County Gas Company, and also debits Fayette County Gas Company purchase account with $600,000.

Q. You say this is an actual receipt of the Fayette County Gas Company for $600,000? A. Yes, sir, there is a written receipt right here.

Q. What does the other voucher, G-353, show? A. This voucher credits the Fayette County Gas Company pur-

—5044—

chase account with $600,000, distributes the cost over the plant accounts, and charges each account with its allocated portion.

Q. Did you say that it distributes the cost—do you mean the $600,000? A. Distributes the purchase price.

Q. Does that voucher show how that purchase price of $600,000 was distributed to the various plant accounts? A. Yes, sir, it does.

Q. And how was that made, as shown by the voucher? A. The distribution was made by pricing a field inventory, using current market prices as of the date of the purchase.

Trial Examiner: Is that what the voucher says?

The Witness: No, the voucher doesn't say that. It says that they paid $600,000. This is a credit of $600,000, and it shows it distributed in these various accounts, but here it shows the various amounts for the pipe account.

By Mr. Milde:

Q. Will you explain to the Examiner that that voucher includes subsidiary pages which appear in the envelope that you have before you? A. Oh, yes, I have another part of this voucher here that shows the inventory that I just referred to, and also the current market prices that the Company used to price this inventory.

—5045—

Q. How do you know they are current market prices? A. By spot-checking some of these prices we were able to

say that they are current market prices, and also from Company men we know that that is the current market price, and they are different from the original cost price.

Now I might say that after we spread these costs, we adjusted the total to the total shown on this voucher; in other words, we came to the $600,000 when we were finished.

Q. Was there anything in that inventory that showed when the properties were originally built, or anything of that sort? A. No, sir, it is just an inventory, using certain prices, and then adjusted.

Q. And if the price didn't come out right, some adjustment was made all along the line, is that what the voucher shows? A. Yes, sir. That makes me believe that it couldn't be original cost or actual cost to the predecessor, or anything of that kind.

Q. Then those amounts that were arrived at that way were used to distribute the purchase price, were they? A. Yes, they were used to distribute the purchase price over the various accounts, plant accounts.

Q. Now do you also have before you the Flaggy Meadow purchase voucher M-44, for 1902, to which Mr. Pace



referred? A. Yes, I have M-44, and I have M-45.

Q. Was there more than one voucher involved in that acquisition? A. Yes, there were several vouchers involved, they are all here.

Q. Well, what does M-45 refer to, which you just mentioned? A. M-45—

Q. (Interposing) Or rather, what does it cover? A. It covers the payment of Hope Natural Gas Company to Flaggy Meadow Gas Company, amounting to $1,134,010.60. It shows—it is a written receipt that the Flaggy Meadow Company received this money, here is the written receipt (indicating); and it also debits Flaggy Meadow Gas Company account with the purchase amount.

Q. You mean an account called Flaggy Meadow purchase account? A. Yes, sir, that is it.

Q. Well, that shows that the Hope Company paid $1,134,000 in round figures for that property, and that the Flaggy Meadow Gas Company received that amount of money, is that right? A. Yes, sir, that is what it shows.

Q. What does Voucher M-44 show? A. M-44 shows that the Company credited the Flaggy Meadow Gas Com-



pany account with the amount of $1,134,010.60, and distributes that cost over the various plant accounts.

Q. How is that distribution of the purchase price made? A. It is made in the same manner as I just described in connection with the Fayette County Gas Company purchase in 1910, namely, by distributing this purchase price over an inventory, using current market prices, and then adjusting the total of these to the purchase price.

Q. Now do these vouchers, in connection with the Fayette County Gas Company acquisition and the Flaggy Meadow Gas Company acquisition, indicate in any way that the Hope Company estimated the original cost of these purchased properties to the companies from whom they bought these properties, and made that estimate at the time of purchase? A. Not at all, it is very evident that the Hope Company did not attempt to estimate the original cost of these properties.

Q. Now, Mr. Pace in his testimony referred to the fact that on the Flaggy Meadow voucher M-44, there appeared the words "Average Cost."

Will you explain where that appears? A. This "Average Cost" appears in one of the summary statements, but this, again, is the adjusted current market price that the company used in pricing the inventory as of the date of the purchase, and it is not the cost to Flaggy Meadow Gas

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Company.

Q. And did you check to ascertain that the costs, or rather the prices used for this inventory pricing in connection with these purchase price distributions over the plant accounts, were not the cost to the predecessor company? A. Yes, sir, it was very plain that it was not the original cost price. We determined the original cost and we know what the actual price is.

Q. And the original cost, as you found by your investigation, was other than the purchase price or the prices appearing in this priced inventory that distributed the purchase price? A. Certainly. The original cost of the— the properties were built at various years, and they couldn't be the same prices.

Q. Are you familiar with Mr. Dunn's testimony that in connection with properties purchased from non-utilities, the practice of the Hope Company was to record the original cost of these properties as nearly as it could be determined at the time of acquisition? A. Yes, sir.

Q. In connection with your examination of the Company's records pertaining to purchased properties, in the course of your original cost study, did you ever find one instance in which the Hope Company estimated or at-

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tempted to estimate the original cost of the properties purchased at the time of acquisition? A. No, sir.

Q. Did you ever find the Company recorded or attempted to record any estimate of the original cost of purchased properties at the time of acquisition? A. No, sir.

12. **COMPANY WITNESS ANTONELLI'S EXHIBIT NO. 59 ENTITLED: "Comparison of Original Cost (Exhibit No. 20) with F. P. C. Examiners' Adjusted Book Cost (Exhibit No. 57)"**

Statement 1

## HOPE NATURAL GAS COMPANY

### Comparison of Original Cost (Exhibit No. 20) with F. P. C. Examiners' Adjusted Book Cost

| Account No. | Description | Total Original Cost (Ex. 20, p. 31 Col. 18)* | F. P. C. Examiners' Adjusted Book Cost (Ex. 57, Vol. I, p. 10, Col. J) | F. P. C. Examiners Lower By |
|---|---|---|---|---|
| **Natural Gas Production Plant** | | | | |
| 330-1 | Natural Gas Producing Lands | $ 2,370.39 | $ 3,319.84 | $ (949.45) |
| 330-2 | Natural Gas Producing Leaseholds | | | |
| | Operated Leaseholds, Gas Rights and Royalties | 1,684,635.98 | 1,599,004.86 | 85,631.12 |
| | Unoperated Leaseholds, Gas Rights and Royalties | 681,882.21 | — | 681,882.21 |
| 330-4 | Rights of Way | 701,555.24 | 645,391.47 | 56,163.77 |
| 330-5 | Other Land and Land Rights | 22,125.56 | 21,008.52 | 1,117.04 |
| 331-2 | Field Measuring and Regulating Station Structures | 40,773.27 | 21,138.92 | 19,634.35 |
| 331-3 | Other Production System Structures | 291,872.40 | 191,188.81 | 100,683.59 |
| 332-1 | Producing Gas Wells—Well Construction | 17,783,637.13 | 4,089,477.71 | 13,694,159.42 |
| 332-2 | Producing Gas Wells—Well Equipment | 8,168,191.52 | 7,610,509.75 | 557,681.77 |
| 333-1 | Field Lines | 12,301,880.71 | 11,296,741.40 | 1,005,139.31 |
| 333-2 | Field Measuring and Regulating Station Equipment | 267,099.02 | 184,385.03 | 82,713.99 |
| 334 | Drilling and Cleaning Equipment | 604,936.40 | 595,692.71 | 9,243.69 |
| 337 | Other Production Equipment | 89,102.37 | 75,532.21 | 13,570.16 |
| | Total Natural Gas Production Plant | $42,640,062.20 | $26,333,391.23 | $16,306,670.97 |
| **Transmission Plant** | | | | |
| 351-12 | Land | $ 164,104.55 | $ 162,912.21 | $ 1,192.34 |
| 351-23 | Rights of Way | 442,393.99 | 391,242.69 | 51,151.30 |
| 352-2 | Compressor Station Structures | 1,725,945.46 | 1,441,882.38 | 284,063.08 |
| 352-3 | Transmission System Measuring and Regulating Station Structures | 11,987.58 | 8,207.21 | 3,780.37 |
| 352-4 | Other Transmission System Structures | 11,508.57 | 6,775.69 | 4,732.88 |
| 353 | Mains | 15,180,596.17 | 14,132,074.72 | 1,048,521.45 |
| 354-2 | Compressor Station Equipment | 8,313,530.62 | 7,683,671.99 | 629,858.63 |
| 354-3 | Transmission System Measuring and Regulating Equipment | 26,713.48 | 17,615.91 | 9,097.57 |
| 354-4 | Other Transmission System Equipment | 23,041.90 | 21,015.55 | 2,026.35 |
| | Total Transmission Plant | $25,899,822.32 | $23,865,398.35 | $ 2,034,423.97 |
| **General Plant (Jointly Used)** | | | | |
| 370 | Land and Land Rights | $ 98,187.72 | $ 96,981.21 | $ 1,206.51 |
| 371 | Structures and Improvements | 274,427.36 | 225,887.78 | 48,539.58 |
| 372 | Office Furniture and Equipment | 195,911.07 | 178,683.34 | 17,227.73 |
| 373 | Transportation Equipment | 148,540.34 | 142,314.49 | 6,225.85 |
| 374 | Stores Equipment | 9,465.88 | 5,106.76 | 4,359.12 |
| 375 | Shop Equipment | 114,705.84 | 104,185.17 | 10,520.67 |
| 376 | Laboratory Equipment | 1,070.22 | 1,003.40 | 66.82 |
| 377 | Tools and Work Equipment | 4,634.27 | 4,545.33 | 88.94 |
| 378 | Communication Equipment | 347,638.66 | 248,975.74 | 98,662.92 |
| 379 | Miscellaneous Equipment | 1,171.98 | 1,147.84 | 24.14 |
| | Total General Plant (Jointly Used) | $ 1,195,753.34 | $ 1,008,831.06 | $ 186,922.28 |
| | Total Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used) | $69,735,637.86 | $51,207,620.64 | $18,528,017.22 |

NOTES: *After deduction of original cost of properties used to transport coke oven gas.

(1) Agrees F. P. C. high -

## Statement 2

### Parts of Original Cost (Exhibit No. 20) Excluded from F. P. C. Examiners' Adjusted Book Cost for Total Gas Plant (Exclusive of Distribution)

| | Description | | Costs |
|---|---|---|---|
| (a) | Direct material and labor costs: | | |
| | For property constructed by Hope and property purchased not as an operating unit | $12,276,097.31 | |
| | For property purchased by Hope from other utilities as an operating unit | 1,747,698.39 | |
| | Total direct material and labor costs | | $14,023,795.70 |
| (b) | Transfers by F. P. C. Examiners from Utility Plant in Service | | 679,093.74 |
| (c) | Overheads: | | |
| | Unloading, hauling and warehouse handling costs | $ 402,010.63 | |
| | Indirect field costs | 434,660.36 | |
| | Purchasing | 277,742.93 | |
| | Payroll | 145,919.38 | |
| | Land | 48,570.09 | |
| | General | 1,885,509.56 | |
| | Total overheads | | 3,194,412.95 |
| (d) | Interest during construction | | 630,714.83 |
| | Total | | $18,528,017.22 |

## Statement 3

### Detail of Direct Material and Labor Costs Excluded from F. P. C. Examiners' Adjusted Book Cost

| | Description | Costs |
|---|---|---|
| (a) | Abstracting or recording costs for 125 deeds | $ 2,670.16 |
| (b) | Obtaining, recording or abstracting costs for 5,539 leases | 120,887.05 |
| (c) | 24 Rights of Way consisting of consideration, damages or obtaining costs | 3,133.30 |
| (d) | 122 wood frame houses, 6'11" x 6'8" x 7'2" average size, and 1,386 wood frame boxes, 4'6" x 3'3" x 2'11" average size | 17,235.46 |
| (e) | 275 buildings ranging in size from 4'2" x 5'6" x 7'5" to 30'4" x 20'6" x 7'7" consisting of warehouses, barns, garages, blacksmith shop, wagon sheds, tool houses, storage buildings, wash houses, etc.<br>686 miscellaneous structures consisting of sidewalks, pits, bridges, fences, pipe skids, pipe racks, etc.<br>1,574 miscellaneous items such as electric lights, plumbing fixtures, drain outlets, painting, water, sewer and drain lines, hardware, roofing, ventilators, electric wiring, sand, cement and stone to complete structure | 293,374.32 |
| (f) | Drilling and other well construction costs for 2,633 wells | 12,643,641.57 |
| (g) | Construction costs for 803,389 feet of pipe lines ranging in size from 1" to 20" | 229,310.08 |
| (h) | Material and installation costs for 2,945 benches, racks, heaters, cabinets, tables, truck flat beds, accessory items, etc.<br>Installation costs for 2,759 items consisting of meter connections of orifice, positive and free consumer meters, miscellaneous equipment such as blueprint machines, brass railing, chain hoists, forgers, motors, air compressors, drip tanks, etc.<br>2,408 law books | 114,213.79 |
| (i) | 752 installation costs for auxiliary equipment units, consisting of tanks, pumps, motors, transformers, engines, turbines, gas coolers, scrubbers, compressor cylinders, air compressors, boilers, traveling cranes, etc.<br>Installation costs for pipe and fittings ranging in size from 2" to 30", valves ranging in size from 2" to 20"<br>Installation costs for miscellaneous items, such as floodlights, flow meters, damper regulators, etc. | 135,078.44 |
| (j) | 9,584 telephone poles with cross arms, brackets, pins, insulators, etc. | 80,640.63 |
| (k) | Difference between direct material and labor costs (exclusive of well construction) to other utilities and F. P. C. Examiners' Adjusted Book Cost for properties acquired as operating units from other utilities | 383,610.90 |
| | Total (as shown on Statement 2, item (a)) | $14,023,795.70 |

## 13. COMPANY WITNESS RHODES' EXHIBIT NO. 21 ENTITLED: "Reproduction Cost New Less Depreciation of Company Properties as of December 31, 1938—Written Statement of George I. Rhodes."

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## WRITTEN STATEMENT OF GEORGE I. RHODES.

### 1. Scope of this Exhibit.

In a separate Company exhibit there is set forth in summary form and in detail the reproduction cost new as of December 31, 1938 of the Company's production property, its transmission property and its general property with certain exceptions therein named. This exhibit describes the methods used in determining the depreciation accumulated in that property.

In general the depreciation accrued or accumulated in the property was determined from an extensive and painstaking examination of the property as hereinafter set forth. However, because of the natural limitations of the practicable methods of inspection and to make full allowance for any and all depreciation that exists in fact the percentages of accrued depreciation determined from observation have been increased appropriately wherever necessary.

The attached summary sets forth by accounts the reproduction cost new, the per cent depreciation found to have accumulated in the property, the amount of this depreciation, the per cent condition and the reproduction cost new less depreciation.

### 2. Depreciation Accumulated in Gas Wells.

The depreciation accumulated in the Company's gas wells was determined from the proportionate decline in useful rock pressure from the time the well was drilled (initial

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pressure) to a lower pressure at which a well may be considered to be exhausted (abandonment pressure). The initial pressures of all operating wells were determined from the Company's records by the Company's geologist. He fixed the average abandonment pressure at 100 pounds per square inch for the Benson and Speechley sands and at

30 pounds per square inch for all other sands. The December 31, 1938 rock pressures were based on the 1938 pressure gaugings taken in the fall of that year as shown by the Company's records.

The per cent condition of each producing sand in each well was determined as the ratio of (a) the excess of the 1938 rock pressure above the abandonment pressure to (b) the excess of the initial rock pressure above the abandonment pressure. The per cent condition of each well was determined as the numerical average of the per cents condition of the sands in that well considering exhausted sands as being in zero condition. The condition of the Company's wells as a group was determined as the numerical average of all the per cents condition of the individual wells.

The per cent condition of Account No. 332-1, Producing Gas Wells—Well Construction, was taken as the average per cent condition of all the wells so determined.

The per cent condition of Account No. 332-2, Producing Gas Wells—Well Equipment, was determined from the gross salvage of equipment, the cost of abandoning wells and the per cent condition of the wells. In determining the per cent condition of this well equipment account the excess of the cost new of the well equipment over and above the net salvage was depreciated in the proportion of the per cent condition of the wells as a group.

* * * * *

[Details of determination of gross salvage, cost of abandoning, and net salvage are omitted.]

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During the life of the well the cost of well construction is depleted from 100 per cent to zero, but the equipment depreciates only to the net salvage or to 36.6 per cent. Thus when a well is fully depleted the loss in equipment is only 63.4 per cent of the total equipment cost. At any condition of the well the per cent depreciation in the equipment is therefore 63.4 per cent of that in the construction.

Taking into consideration the above matters, depreciation was found in the Company's gas wells as follows:

| | Gas Well Construction | Gas Well Equipment |
|---|---|---|
| Total depreciation | 68.7% | 43.6% |
| Corresponding condition | 31.3% | 56.4% |

**3. Depreciation Accumulated in Pipe Lines.**

* * * * *

[Detailed description of field inspection of pipe at 554 locations is omitted.]

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The depreciation was determined from a consideration of the field inspections above described. The records of the field work were tabulated and summarized. They were subject to study and analysis both scientific and practical. Consideration was given to the many factors affecting depreciation through corrosion which are described in the succeeding paragraphs.

Renewals of pipe are most commonly the result of a troublesome succession of leaks caused by corrosion. As leaks occur they are stopped by bolting band clamps around the pipe with a rubber packing over the leaks. Sometimes two or more leaks develop at widely separated dates on the same joint of pipe. The development of leaks first occurs in stretches of lines where for various reasons local condi-

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tions are favorable to corrosion. These are called "hot spots" and range from a few joints to thousands of feet in length. When the leaks begin to develop with troublesome frequency not only is the pipe in the "hot spot" itself renewed but also pipe for an appropriate distance on either side. In practice the worst joints of pipe may have two or more leaks. Stretches of pipe 100 feet long may contain five to ten leaks and other stretches of 100 feet may have no leaks at all. Some of the pipe is suitable for reuse with

a simple cleaning operation, some requires welding up the pits before it can be reused and other pipe is reduced to junk value.

The progress of corrosion has universally been found to fall off with age. When pipe is first buried it starts to corrode rapidly. As time goes on the intensity of corrosion slows down. The field inspections of the Company's major pipe lines were specially studied to determine the Company's experience in this connection. It was for this reason that more inspections were made on the long large lines than on other lines and that many inspections were made on new lines to insure adequate data on corrosion in its early stages. It was found from this study that the corrosion of the Company's pipe slows down to such an extent that doubling the time the pipe has been in place results in less than a 50 per cent increase in pit depths.

It is also the universal experience that the greater the lengths of pipe examined on inspection the greater will be the average depths of the deepest pits found. This is illustrated by the fact that the average depths of the deepest pits found on the 554 three foot sections of the Company's pipe inspected in 1939 were 10 per cent greater than the average depths of the deepest pits found in the 1108 eighteen inch sections. A study of the relative depths of the deepest pits in the 18 inch sections was made in conjunction with the deepest pits in the 3 foot sections from which was determined by scientific analysis the average depths that could be expected in greater lengths of the Company's pipe—20 foot, 40 foot, or 50 foot—as the case might be. This study also determined the number of pits required to be welded in reconditioning.



Through a correlation and application to the field inspections of the rules of corrosion outlined above by the use of proper engineering methods it was determined that the production system pipe lines of the Company had pro-

gressed through corrosion towards complete depreciation by 22.5 per cent and that the transmission system pipe lines of the Company had progressed through corrosion towards complete depreciation to the extent of 20 per cent. To insure the inclusion of all depreciation existing in fact in the lines the above percentages were increased to 26% in the production system pipe lines and to 21% in the transmission system pipe lines. While these inspections were made in the spring and early summer of 1939 they fairly represent the accrued depreciation as of December 31, 1938.

**4. Depreciation Accumulated In Compressor Station Equipment.**

The wear and tear and other deterioration that has developed in the compressor station equipment was determined from a detailed field inspection of all of the main units and a more general but complete inspection of the many units of auxiliary and miscellaneous equipment. Particular attention was given to the wearing parts such as power and compressor cylinder assemblies, valves and



valve gears and the like. The condition of each important wearing part was determined and recorded in the field. The field reports were summarized, analyzed and studied, and determinations made of the over-all physical condition of the equipment in each compressor station.

In determining the condition of this equipment consideration was given to the fact that the greater part of the cost of the equipment is in non-wearing parts which are subject to replacement only as a result of an accident. The over-all rating of any particular unit was determined by giving weight to the condition and the relative contribution to cost of the wearing parts and the existence of any defects in the non-wearing parts which had been damaged by accidents or otherwise. In determining the condition of boilers not only were they inspected but several years'

insurance inspection reports were taken into consideration. It was not reasonably possible to inspect buried equipment such as foundations, piping, etc. and such equipment in each station was rated at the average condition of all the equipment in that station. The yard piping was rated as being in the same physical condition as transmission line piping. The over-all physical condition of each station was arrived at by giving weight to the relative cost of the equipment separately rated on inspection.

A few stations contain equipment which has not been used for a period of years but which is available for movement to and re-erection at other locations as required. In stations containing this equipment, its cost installed has been depreciated to the cost of the equipment itself as though carried in a warehouse. In other stations equipment of types being gradually retired by the Company or

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susceptible of modernization through retirement and replacement of parts has been appropriately depreciated.

The observed depreciation accumulated in the equipment in each compressor station was determined by a consideration of the factors outlined above. It was found that in the aggregate the Company's compressor station equipment had depreciated 17 per cent. To insure the inclusion of all the depreciation existing in fact in the compressor station equipment the above percentage was increased to 19 per cent. While these inspections were made in the fall of 1939 they fairly represent the accumulated depreciation as of December 31, 1938.

**5. Depreciation Accumulated In Buildings And Structures.**

The deterioration existing in buildings costing more than $1000 each was determined in general by a detailed inspection of each of the buildings in the field. These buildings aggregate some 470 in number and constitute about 71 per cent of all the Company's structural property. Mis-

cellaneous improvements aggregating a further 19 per cent of all the Company's structural property were separately inspected to the extent of about one-half in value, the remainder being largely underground. The deterioration in the smaller buildings, some 2670 in number, was determined by an extensive sampling and individual inspection of about 20 per cent of these smaller buildings. In this field inspection the various parts of the larger buildings and structures such as visible foundations, walls, framework and roof were separately rated as to physical condition. The smaller buildings were inspected in less detail appropriate to their lesser costs.

The field inspections were tabulated and summarized and the condition of the buildings determined in groups such as those at each compressor station and the like. In determining the depreciation existing in these buildings be-

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cause of deterioration, there was taken into account the depreciation found to exist in the various parts, the relative extent to which these parts contributed to the whole cost of the structures and the relative extent to which the individual groups of structures contributed to the whole cost of the group. Incidental details of the structures were taken as being in the same condition as the structures themselves.

Certain buildings soon to be retired were depreciated to gross salvage. Generally such buildings shelter equipment available for movement to other locations. The known early abandonment of certain structures or parts thereof was appropriately allowed for.

The observed depreciation accumulated in the buildings and structures of the several accounts both as found and as adjusted to insure the inclusion of all the depreciation existing in fact are shown below.

| | Observed Depreciation | Total Depreciation |
|---|---|---|
| Gas Well Structures | 40% | 44% |
| Field Measuring and Regulating Station Structures | 44 | 49 |
| Other Production System Structures | 39 | 43 |
| Compressor Station Structures | 25 | 28 |
| Transmission System Measuring and Regulating Station Structures | 37 | 41 |
| Other Transmission System Structures | 27 | 30 |
| General Structures | 26 | 27 |

The inspections of property on which the above percentages are based were made in the fall of 1939, but they fairly represent the condition of the property as of December 31, 1938.

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**6. Depreciation Accumulated In Measuring And Regulating Station Equipment.**

The depreciation accumulated in measuring and regulating station equipment both production and transmission was determined by inspections in the field and by a consideration of the Company's records related to the retirement and depreciation of such property.

Installations of meters and regulators were conditioned for physical depreciation by taking into consideration their condition of maintenance found by inspection and the fact that the greater part of the total cost of such equipment consists of parts which are replaced for causes other than deterioration. The buried pipe in the production system meters and regulators was taken to be in the same physical condition as the production system pipe lines and the buried pipe in the transmission system installations was taken to be in the same physical condition as the transmission system pipe lines. It was found that the total observed

deterioration existing in meter and regulator equipment was 19 per cent for the production equipment and 22.5 per cent for the transmission equipment. To insure the inclusion of all depreciation existing in fact in such equipment, the above percentages were increased to 21 per cent in production meter and regulator equipment and 27 per cent in transmission meter and regulator equipment.

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**7. Depreciation Accumulated In Communication Equipment.**

The depreciation accumulated in communication equipment was determined from an inspection of the property in the field. By a sampling method approximately 1,000, or 5 per cent, of the Company's poles were inspected as to condition at reasonably accessible locations. At each point of inspection the poles, fixtures, insulators and supporting wire were separately rated as to their condition. All of the station equipment was inspected in the field.

It was found that the deterioration existing in the communication equipment is 27 per cent. To insure inclusion of all depreciation existing in fact the deterioration as found was increased to 32 per cent. The inspections were made in the summer of 1939 but they fairly represent the condition as of December 31, 1938.

**8. Depreciation Accumulated In Transportation Equipment.**

The depreciation accumulated in automotive equipment was determined from a study of the records of 155 automobiles and 131 trucks operated and disposed of by the Company from 1925 to 1938, inclusive, as compared with the 77 automobiles and the 76 trucks owned as of December 31, 1938. These records show that the mileage at time of turn-in has increased materially within the past ten years, as well as the percentage of cost recovered at the time of turn-in. This experience of the Company is in accord with

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the universal experience as to the improving quality of automobiles and trucks available in the market. Taking into account this steady improvement in automotive equipment as to mileage and turn-in ratio and the average mileage of automobiles and trucks at December 31, 1938, it was found that the automobiles in the aggregate were 36 per cent depreciated and the trucks in the aggregate 50 per cent depreciated as of December 31, 1938. The condition of the other transportation equipment amounting to about one-eighth of the whole account was determined in various ways appropriate to the class of equipment, and was found to be 42 per cent depreciated. Transportation equipment in the aggregate was found to be 44 per cent depreciated or in 56 per cent condition.

**9. Depreciation Accumulated In Miscellaneous Property Accounts.**

The major accounts including gas wells, pipe lines, compressor equipment and structures constitute about 95 per cent of the Company's properties subject to depreciation. The methods of determining the depreciation accumulated in the property constituting these accounts have been described above in considerable detail. There have also been described above the methods of determining depreciation accumulated in four minor but diverse types of property aggregating about 1 per cent of the remaining 5 per cent. The depreciation accumulated in the other miscellaneous property accounts covering about 4 per cent of the depreciable property has been determined by similar methods appropriate to the respective classes of property. The same care has been exercised in determining the depreciation of these accounts as has been used in the major

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accounts and described above. The condition of these various accounts is shown in the summary, which is attached.

**10. Depreciation Accumulated In Undistributed Construction Costs.**

In the Company exhibit setting forth the estimated cost of reproduction new of the Company's properties, allowances for undistributed construction costs were adopted which as there explained had repeatedly been used by agreement before the Public Utilities Commission of Ohio and adopted by that Commission in its findings relative to the Company's property. These allowances aggregated 17.72%.

These agreements, above referred to, reached by representatives of The East Ohio Gas Company and representatives of the City of Cleveland in the 1931 East Ohio-Cleveland case and with representatives of the City of Akron in the 1932 East Ohio-Akron case, included also agreements relative to the extent to which these undistributed construction costs depreciated with the property. It was agreed in both cases that those undistributed construction costs to the extent of 11.51% depreciated with the Company's property and the Ohio Commission so found in the 1932 Akron and the 1937 East Ohio-Cleveland cases. In the 1931 Cleveland case the Commission made no findings as to depreciated cost of the Company's property except as to pipe lines.

In view of the repeated use of the above percentage of depreciating undistributed construction costs by engineers representing the various parties to rate controversies involving this same property and by the Ohio Commission in its findings related thereto, this same percentage has been used in this exhibit. Such allowance for the depreciating undistributed construction costs is fair and reasonable.

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**11. Summary**

The estimated cost of reproduction new of the Company's properties here considered as set forth in the separate Company exhibit previously referred to and this re-

production cost new less depreciation determined as described in this exhibit, all as of December 31, 1938, are summarized by accounts on the attached statement which shows:

| | |
|---|---|
| Reproduction cost new as of December 31, 1938 | $94,973,856 |
| Depreciation accumulated as of December 31, 1938 | 32,774,442 |
| Reproduction cost new less depreciation as of December 31, 1938 | $62,199,414 |
| Per cent of depreciation accumulated | 34.51% |
| Corresponding per cent condition | 65.49% |

SIGNED at Clarksburg, West Virginia, this May 16, 1940.

GEO. I. RHODES.

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## HOPE NATURAL GAS COMPANY

### Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used)

### Estimated Costs of Reproduction New and Less Depreciation as of December 31, 1938

(Exclusive of Leaseholds, Properties Used to Transport Coke Oven Gas, Working Capital and Going Concern Costs or Value)

### Summary by Accounts

| Account Nos. Old | Account Nos. New W. Va. P. S. C. | Description | Cost New | Accumulated Depreciation Per Cent | Accumulated Depreciation Amount | Per Cent Condition | Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|
| **Natural Gas Production Plant (exclusive of leaseholds and properties used to transport coke oven gas)** | | | | | | | |
| 204 | 330-1 | Natural Gas Producing Lands | $ 2,275 | 0.0 % | $ — | 100.0 % | $ 2,275 |
| 206 | 330-4 | Rights of Way | 772,814 | 0.0 | — | 100.0 | 772,814 |
| 204 | 330-5 | Other Land and Land Rights | 21,045 | 0.0 | — | 100.0 | 21,045 |
| 210 | 331-1 | Gas Well Structures | 11,912 | 44.0 | 5,241 | 56.0 | 6,671 |
| 209 | 331-2 | Field Measuring and Regulating Station Structures | 58,222 | 49.0 | 28,529 | 51.0 | 29,693 |
| 210 | 331-3 | Other Production System Structures | 374,267 | 43.0 | 160,935 | 57.0 | 213,332 |
| 211 | 332-1 | Producing Gas Wells—Well Construction | 19,321,139 | 68.7 | 13,273,622 | 31.3 | 6,047,517 |
| 212 | 332-2 | Producing Gas Wells—Well Equipment | 10,874,199 | 43.6 | 4,741,151 | 56.4 | 6,133,048 |
| 213, 214 | 333-1 | Field Lines | 17,282,312 | 26.0 | 4,493,401 | 74.0 | 12,788,911 |
| 215, 217 | 333-2 | Field Measuring and Regulating Station Equipment | 307,222 | 21.0 | 64,517 | 79.0 | 242,705 |
| 216 | 334 | Drilling and Cleaning Equipment | 1,028,888 | 27.0 | 277,800 | 73.0 | 751,088 |
| 249, 251, 256, 257 | 337 | Other Production Equipment | 112,910 | 28.0 | 31,615 | 72.0 | 81,295 |
| | | Total Natural Gas Production Plant (exclusive of leaseholds and properties used to transport coke oven gas) | $50,167,205 | 46.00% | $23,076,811 | 54.00% | $27,090,394 |
| **Transmission Plant (exclusive of properties used to transport coke oven gas)** | | | | | | | |
| 218 | 351-12 | Land | $ 155,842 | 0.0 % | $ — | 100.0 % | $ 155,842 |
| 220 | 351-23 | Rights of Way | 554,352 | 0.0 | — | 100.0 | 554,352 |
| 221, 223 | 352-2 | Compressor Station Structures | 1,957,473 | 28.0 | 548,092 | 72.0 | 1,409,381 |
| 222 | 352-3 | Transmission System Measuring and Regulating Station Structures | 14,842 | 41.0 | 6,085 | 59.0 | 8,757 |
| 223 | 352-4 | Other Transmission System Structures | 12,507 | 30.0 | 3,752 | 70.0 | 8,755 |
| 226 | 353 | Mains | 16,500,288 | 21.0 | 3,465,060 | 79.0 | 13,035,228 |
| 224 | 354-2 | Compressor Station Equipment | 9,874,271 | 19.0 | 1,876,111 | 81.0 | 7,998,160 |
| 225 | 354-3 | Transmission System Measuring and Regulating Equipment | 30,731 | 27.0 | 8,297 | 73.0 | 22,434 |
| 249, 251, 256, 257 | 354-4 | Other Transmission System Equipment | 30,795 | 27.0 | 8,315 | 73.0 | 22,480 |
| | | Total Transmission Plant (exclusive of properties used to transport coke oven gas) | $29,131,101 | 20.31% | $ 5,915,712 | 79.69% | $23,215,389 |

(Concluded on next page)

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## Summary by Accounts (Concluded)

| Account Nos. Old | Account Nos. New W. Va. P. S. C. | Description | Cost New | Accumulated Depreciation Per Cent | Accumulated Depreciation Amount | Per Cent Condition | Cost New Less Depreciation |
|---|---|---|---|---|---|---|---|
| **General Plant (Jointly Used)** (exclusive of properties used to transport coke oven gas) | | | | | | | |
| 244, 245 | 370 | Land and Land Rights | $ 75,018 | 0.0 % | $ — | 100.0 % | $ 75,018 |
| 247, 248 | 371 | Structures and Improvements | 297,298 | 27.0 | 80,270 | 73.0 | 217,028 |
| 249 | 372 | Office Furniture and Equipment | 210,047 | 30.0 | 63,014 | 70.0 | 147,033 |
| 252, 253, 256 | 373 | Transportation Equipment | 166,990 | 44.0 | 73,476 | 56.0 | 93,514 |
| 251 | 374 | Stores Equipment | 10,304 | 25.0 | 2,576 | 75.0 | 7,728 |
| 251, 256, 257 | 375 | Shop Equipment | 189,110 | 23.0 | 43,495 | 77.0 | 145,615 |
| 224, 257 | 376 | Laboratory Equipment | 3,971 | 15.0 | 596 | 85.0 | 3,375 |
| 257 | 377 | Tools and Work Equipment | 5,365 | 15.0 | 865 | 85.0 | 4,560 |
| 255 | 378 | Communication Equipment | 419,860 | 32.0 | 134,355 | 68.0 | 285,505 |
| 249, 257 | 379 | Miscellaneous Equipment | 1,488 | 25.0 | 372 | 75.0 | 1,116 |
| | | Total General Plant (Jointly Used) (exclusive of properties used to transport coke oven gas) | $ 1,379,451 | 28.92% | $ 398,959 | 71.08% | $ 980,492 |
| **Total Of Above** | | | $80,677,757 | 36.43% | $29,391,482 | 63.57% | $51,286,275 |
| **Undistributed Construction Costs** | | | 14,296,099 | 23.66% | 3,382,960 | 76.34% | 10,913,139 |
| **Total Natural Gas Production Plant, Transmission Plant and General Plant (Jointly Used)** (exclusive of leaseholds, properties used to transport coke oven gas, working capital and going concern costs or value) | | | $94,973,856 | 34.51% | $32,774,442 | 65.49% | $62,199,414 |

## 14. TESTIMONY OF COMMISSION WITNESS CHARLES W. SMITH AS TO PRINCIPLES OF DEPRECIATION, WEDNESDAY, APRIL 23, 1941, RECORD PAGES 2826 TO 2850.

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Whereupon, CHARLES W. SMITH resumed the stand and testified further as follows:

DIRECT EXAMINATION by Mr. Springer.

Q. Mr. Smith, you testified on the principles of accounting yesterday, did you not? A. I did.

Q. And you made a statement of qualifications. Have you had any experience in connection with determining depreciation expense and accrued depreciation, and if so will

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you please describe it briefly? A. I have been actively dealing with depreciation matters since 1920. When I was in the Income Tax Unit of the Internal Revenue Bureau, I necessarily passed upon depreciation claims in numerous, probably hundreds, of cases. In fact, as I look back upon it, it seems that almost every large case involved depreciation in one manner or another. When I was in the employ of the Public Service Commission of Maryland, one of my duties was to pass upon matters of depreciation expense and the depreciation reserve.

Since joining the staff of the Federal Power Commission, I have taken an active part in the functions of the Commission as relating to depreciation. Here again, depreciation is involved in almost every rate case. Thus, since 1920, I have been constantly applying depreciation principles, have been determining service lives, depreciation rates, depreciation expense and accrued depreciation. In addition, I have been a close student of public utility depreciation matters and have taken a very active part in

the work of the Committee on Depreciation of the National Association of Railroad and Utilities Commissioners.

Q. Have you supervised in a general way the preparation of an exhibit showing depreciation and depletion of gas plant as of December 31, 1938, for the Hope Company? A. I have.

Incidentally, when I speak of depreciation hereafter,

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depletion will be included in the meaning of the term. For convenience, in other words, both depreciation and depletion will be spoken of as depreciation.

Q. And the exhibit referred to shows the annual and accrued depreciation and depletion as related to the original cost of the gas plant of the Company, does it not? A. It does.

Q. Are there two phases to the depreciation problem? A. There are. One phase relates to depreciation expense, and the other phase relates to depreciation in the properties as of a particular date, the latter being referred to as accrued depreciation.

Q. Is the purpose of depreciation accounting to determine, as reasonably accurately as possible, another element of the cost of service for a given period? A. Yes, that is true.

Q. What do you mean by the word "depreciation"? A. Depreciation signifies the expiration or consumption, in whole or in part, of the service life, that is, the economic life or utility, of depreciable property resulting from the action of one or more of the various forces which operate to bring about the retirement of such property from service. Among the forces so operating are wear and tear, decay, action of the elements, inadequacy, obsolescence, and public requirements.

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Q. Is depreciation wear and tear? A. No, depreciation is not wear and tear. Wear and tear is simply one of

the forces which operate to bring about the retirement of property.

Q. Is depreciation inadequacy? A. No, inadequacy is also only one of the forces which operate to bring about the retirement of property.

Q. Is depreciation obsolescence? A. No, true depreciation is not obsolescence. Again, obsolescence is merely one of the forces which bring about the ultimate retirement of property.

Q. Will you please explain the difference between depreciation per se and the forces bringing about the retirement of property? A. All physical property of a utility, except certain land, will come to the end of its useful or economic life. If it did not come to the end of its economic life, if its life, in other words, were perpetual, there would be no depreciation. The force or forces causing the ultimate retirement of property are usually classified into two broad categories, such as physical and functional. Wear and tear, or deterioration, is the chief physical cause of retirement, whereas inadequacy and obsolescence are the chief functional causes.

Sometimes, of course, several causes of retirement are acting simultaneously. Depreciation, however, is not syn-

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onymous with retirement or with the cause of retirement. Depreciation results, as I have indicated, because the properties will not last forever. Depreciation, itself, is the diminution, the lessening, or the reduction in the service life of properties.

Service life is the same as economic life, the utility of property, or the over-all work it will do or what it will yield during its useful life in service. Depreciable assets are, therefore, no more than stored-up services. The purchase of a gas well is the purchase of so much gas in the ground. The purchase of an automobile is, in reality, the purchase of so many automobile miles or automobile hours of service.

The purchase of a building is the purchase of so much shelter. The purchase of a gas transmission line is the purchase of so much transmission service. The purchase of capital goods, in other words, is the purchase of future service. This is obviously so, for otherwise capital goods would have no economic value. As Professor Taussig classically remarked, "the printing press ripens into books."

Plant costs are incurred to make production possible. The use of plant results in some sort of production, and this production reduces to possession some of the over-all stored-up service, over-all yield of work units.

As service is performed, a corresponding part of the cost of plant—that is, the cost of stored up services—should be charged as an expense of doing business—depreciation expense.

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As this service capacity, or utility, or economic life, or service life, which Professor Paton calls a "bundle of services," is used up, depreciation occurs regardless of the cause of final retirement. The present fact of depreciation does not vary because of the nature of the ulfimate retirement. Only the fact of ultimate retirement and the time of retirement are important. The final retirement may be due to deterioration, exhaustion of natural resources, inadequacy, obsolescence, or some other cause, but the cause of ultimate retirement should not be confused with depreciation itself, which is a diminution in service life.

To illustrate this point, if a certain gas well will produce one million cubic feet of gas during its useful life, and if the well has no salvage value, then every time a thousand cubic feet of gas is removed, a proportionate part of the economic or service life of the well has been consumed or has expired. This results in depreciation and depletion. Each unit of production,—and I use production in the broad sense of service,—reduces the utility or the over-all yield of the item and reduces the economic worth. This reduction is depreciation.

Q. Then what you have said supports the unit-of-production method of computing depreciation, Mr. Smith? A. Yes, theoretically, it does, and actually that method has been applied in the instant case to as large a part of the

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property of the company as is feasible. In other words, certain of the costs, such as the cost of well construction and the cost of laying field lines, are depreciated on the basis of production. It is not practical, however, to apply that method to many other items of plant. It is very seldom possible to apply the unit-of-production method to a large part of the properties of a public utility. The reason is that sufficient data necessary to apply the unit-of-production method are not available, and could not be made available without the expenditure of large sums of money, and it is doubtful if the data could be made available even by that means, and the result would not likely vary greatly from results which obtain from the use of the straight-line method. The straight-line method is the nearest approach to the unit-of-production method for a utility, in my opinion. That method emphasizes the time element. There is very good reason for the application of the straight-line method to public utility properties, for the service or economic life does have a direct relationship to the expiration of time, and because public utility operations are relatively stable compared with other business enterprises.

I might add, too, that the straight-line method is used far more than any other depreciation method. In fact, no other method comes even close to having the widespread application of the straight-line method.

Q. Well, Mr. Smith, what, in your opinion, is "actual

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existing depreciation"? A. Actual existing depreciation is the expired, diminished, or consumed service life, which I also term the economic life, of a utility's depreciable plant.

Q. How, in your opinion, should actual existing depreciation be determined? A. First of all, it is necessary to estimate the over-all service life of the various property items. In making this estimate, resort should be had to a thorough field inspection of the property and then consideration should be given to all other available data, such as life tables, mortality curves, retirement experience of the company, et cetera, which may have a bearing on the problem.

After service lives have been determined, they are converted into depreciation rates. These rates should then be applied to the cost of properties so as to determine that part of the cost which is associated with the expired, consumed, or diminished service life. This means that a properly computed depreciation reserve will be determined from the depreciation rates. In other words, a properly computed depreciation reserve measures, in my opinion, the actual existing depreciation on a cost basis, for it measures the cost of the economic life which has expired, or which relates to past transactions.

It was the practice at one time to charge off the plant



cost directly as depreciation occurred rather than indirectly through the use of a depreciation reserve. It should be borne in mind that the reserve for depreciation is simply a complement to the plant account. It is a part of the plant account, being contra thereto.

Q. In your opinion, is so-called "observed depreciation" "true depreciation?

Mr. Cockley: To which question the respondent objects on the ground that the witness has shown no qualifications to answer it, it being, as I understand it, a strictly engineering question.

Mr. Springer: It is hardly strictly an engineering question that hasn't come to Mr. Smith's knowledge in his 20 years of appraising depreciation studies. He is certainly entitled to an opinion on it.

Mr. Cockley: May I interrogate him briefly upon his qualifications?

Trial Examiner: Well, I doubt that that will be necessary. There has always been a question in my mind as to whether it was either strictly an engineering problem or strictly an accounting problem, and I have often wondered just what kind of an expert you might put on the stand to testify with respect to that. If you wish to go into Mr. Smith's qualifications in that respect, you may do so.

Mr. Springer: Could that be reserved until he has an-

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swered my question? He is amply qualified to assert his opinion on such a depreciation study as the so-called observed depreciation.

Trial Examiner: Of course, the question has been raised as to whether he is or not. I think perhaps we might postpone the answer to the question until Mr. Cockley has had an opportunity—

Mr. Springer: (Interposing) He has already testified that he has spent 20 years in appraising depreciation studies, and that he himself has determined service lives and the annual depreciation expense.

Trial Examiner: Well, I am satisfied as to the witness' qualifications, but you realize, of course, that Mr. Cockley is making up a record here, and he is entitled to develop those qualifications on that.

Mr. Cockley: Am I right, Mr. Smith, that your experience with depreciation in the past has been as an accountant?

The Witness: Not exclusively, Mr. Cockley.

Mr. Cockley: Are you an engineer?

The Witness: No, sir.

Mr. Cockley: Have you had any engineering experience at all?

The Witness: I have charge of a certain engineering group, they work under my direction. I have studied the phases of engineering which relate to regulation, certainly

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for the last 12 years or more.

Mr. Cockley: Will you define for me exactly what you mean or what you understand by so-called "observed depreciation" as used in the question put to you?

The Witness: You go out and look at the properties; you measure the deterioration as far as you can, you measure the pitting in pipes, you observe the physical condition of structures and equipment, you take into consideration all of the defects which are visible to the eye, you take into consideration all of the inadequacy or obsolescence which is visible or effective as of that time, and you convert that into a condition per cent.

I have accompanied field parties in making such studies. I very frankly think that they are worthless.

Mr. Cockley: Well, just a minute. What you think about it isn't the question.

Did you ever have to determine, yourself, the condition of any part of a gas plant or other property based on that?

The Witness: The condition is not depreciation, no, sir.

Mr. Cockley: Or the amount of existing depreciation in it, or how much its service life has expired? Did you ever have to do that as a practical matter?

The Witness: I think we have done it here, a group of us—

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Mr. Cockley: (Interposing) Just a minute—

Mr. Springer: (Interposing) Permit the witness, please, to finish his answer.

Mr. Examiner, I think the witness should be protected from this interjection of question after question before he completes his answer and explanation.

Mr. Cockley: You are the one that is interrupting him now.

Mr. Springer: I am protecting him now.

Trial Examiner: Well, I really don't think the witness needs much protection, as far as that is concerned.

Mr. Cockley: I haven't observed that he did.

Go ahead and make your explanation.

The Witness: What I wanted to say was that Mr. French, of the Division of Gas Engineering, determined the service lives from a thorough inspection of the property. My staff worked in very close association and collaboration with Mr. French, and we applied his service lives or depreciation rates, so that in this particular case I have not determined the depreciation rate element which goes into the determination of expired service lives.

Mr. Cockley: Isn't—

The Witness: (Interposing) But I say a group of us have done that job.

Mr. Cockley: Mr. Smith, isn't it a fact that you

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couldn't, yourself, go to any piece of machinery in the Hope Company's property, or pipe line, and tell from an inspection, or otherwise, when that property's service life would end, or had ended?

The Witness: If it had ended, certainly I could tell.

Mr. Cockley: Well, you could tell because some practical gas man told you that this engine was no longer useful?

The Witness: That is probably so.

Mr. Cockley: And you couldn't—

The Witness: (Interposing) You asked me two questions before.

Mr. Cockley: Answer the other one, then.

The Witness: You asked me whether I could tell the future life. I think by making a study of all the information available I could tell the future life. I have done it in many instances.

Mr. Cockley: Could you look at a compressor and tell whether it was in good operating condition or not?

The Witness: I wouldn't attempt to.

Mr. Cockley: Could you tell by looking at a compressor engine how much of its useful service life—if you had all the information, now, that an engineer could get—could you tell how much of its useful service life had expired?

The Witness: I wouldn't want to do that, and I haven't done it here.

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Mr. Cockley: You couldn't do that, you don't feel qualified to do that, is that right?

The Witness: I wouldn't want to attempt it.

Mr. Cockley: And isn't the most important factor you take into consideration, in determining the service life, the amount of service life that has expired in an item of property at the time it is observed?

The Witness: Well now, we do, but that is not usually done in observed depreciation; that is, our method—

Mr. Cockley: (Interposing) Well, isn't that a fact, that your engineer has to go and consider all the facts that his observation and investigation show him, and determine how much of the service life has expired up to a given date? Isn't that right?

The Witness: No, he doesn't do it that way. In effect he gets that answer, but what he does is to determine an over-all service life and then, by knowing the age of the property, he can get the amount expired.

Mr. Cockley: Isn't it a fact, Mr. Smith, that what he does is determine the amount of the service life that has expired in a given number of years, and project that in the future?

The Witness: No, indeed, that is wrong. First of all, to get the right answer, he must project the over-all service life to get the proportion which has expired,—he can't get the proportion expired unless he knows the over-all life.

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Mr. Cockley: You have to determine the over-all, first?

The Witness: That is the only real way to do it.

Mr. Cockley: And you don't use at all the condition of the property that he finds it in after 20 years of service to prognosticate how much longer it is going to last?

The Witness: Yes, indeed, you do.

Mr. Cockley: That is exactly what you do?

The Witness: Yes, to get the over-all life.

Mr. Cockley: And that observation and that determination is an engineering question, isn't it, primarily?

The Witness: We have treated it so here.

Mr. Cockley: All right.

I object to this witness expressing any comments on whether, in his opinion, so-called observed depreciation is true depreciation in view of the fact, as he has just stated, that the essential thing in it is an engineering determination.

Trial Examiner: The objection is overruled.

Mr. Cockley: Note an exception.

The Witness: In the cases with which I am familiar, and I have studied a great many cases involving observed depreciation, observed depreciation was not true depreciation. I do not believe true depreciation can possibly be determined by observation alone, because I do not believe by observation alone the expired service life can be de-

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termined. Observation and field inspection of physical properties should be resorted to for the purpose of aiding in the determination of service lives, that is to say, depreciation rates, and these in turn are used in determining the exhausted service life. Observation should not be resorted to for the purpose of determining directly from the physical condition of property the depreciation therein. To repeat, field inspections are most important, but their importance lies in the determination of service lives in

order that true depreciation, which is the diminished, consumed or expired service life, may be computed.

By Mr. Springer:

Q. Mr. Smith, in a gas company where much of the property is underground and not visible, would it be possible for anyone to go out and inspect the property and reach an accrued depreciation answer, if he had no other information than his inspection notes?

Mr. Cockley: I object. That is a theoretical question that relates to a form of inspection to determine a condition, which nobody, so far as I know, has employed in this case.

In addition to that, it calls for an engineering opinion which this witness is obviously not qualified to express.

Mr. Springer: He is certainly entitled to an opinion on this subject, and that is just what Mr. Rhodes did when he had 40 or 50 men look at the property and take samples

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and come in with some sort of an accrued depreciation percent. I am asking him whether or not he knows anybody who has X-ray eyes who can tell how much depreciation exists in a property when most of it isn't visible.

Trial Examiner: You asked him if anybody could do it, not if he knew anybody.

Mr. Cockley: I object to counsel's characterization of what Mr. Rhodes did, because it is just as inaccurate as to call "black," "white."

Wholly aside from that, if this witness wants to be used as a rebuttal witness to Mr. Rhodes' depreciation study in his determination of percent condition, then he ought to take up his exhibit in a logical way and present it, and not come in with some general comment as to what he generally thinks about this assumed situation, which doesn't exist here at all. It is plainly an improper question.

Trial Examiner: Will you read the question again, please?

(The question was read by the reporter.)

Mr. Cockley: There is no such case here.

Trial Examiner: Well, I am concerned about the ability of the witness to testify as to what it is possible for somebody to do. The objection is overruled.

Mr. Cockley: Note an exception.

The Witness: I presume it would be possible to go out and dig up all the pipe and see it. That usually isn't done.

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In practice, sample studies are made. It is my opinion that these sample studies are not sufficient to show the actual existing depreciation of the properties, because they are not sufficient to enable a determination of the exhausted service life.

Mr. Cockley: I move that the answer be stricken on the ground that the last half of it is not responsive to the question.

Trial Examiner: It seemed to me that the last half was more responsive than the first.

Mr. Cockley: Then I move to strike it all out.

Trial Examiner: The motion is overruled.

Mr. Cockley: Exception.

By Mr. Springer:

Q. Mr. Smith, I believe you said that it wasn't possible to see the inside of much of the gas company's equipment. Is it important to know the age of the various classes of property so far as that can be ascertained? A. Yes, it is important to have knowledge of the age of property in computing the expired service life.

Q. And is it important to know the retirement experience of the company for various classes of property? A. Yes, that retirement experience of the company is one of the factors that ought to be taken into consideration in determining service lives.

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Q. Is it important to study the maintenance policies and practices of the company? A. Yes, of course.

Q. From your former testimony, then, you believe that properly computed depreciation reserves measure the actual depreciation in properties? A. Yes, that is correct, assuming now we are speaking of a cost basis. It is correct, for in my opinion, a properly computed depreciation reserve measures, as best can be measured, that part of the bundle of services we call plant, which has been used up.

Q. Now, Mr. Smith, in your discussion of the principles of depreciation and the definitions that you have given, are they consistent with the definitions of depreciation and depletion in the Federal Power Commission's Uniform System of Accounts for Natural Gas Companies?

Mr. Cockley: I object to that. Plainly, if they want to prove what these are, they should introduce the exhibit and let it speak for itself, and not ask the opinion of the witness as to whether what he has done is, in his opinion, consistent with it, when they can safely wait until there is an attack on him on that basis.

Mr. Springer: Mr. Examiner, he is certainly entitled to state whether or not his testimony is consistent with the definition in the System of Accounts which he is re-

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sponsible for interpreting.

Mr. Cockley: I never heard of such a suggestion in my life, for a witness to do that. Now he may testify, if he wants to, that the depreciation principles set forth in the Code of Accounts were the ones he instructed the engineers to follow. That would be perfectly proper. But to ask him if, in his opinion, his own testimony is consistent with that Code of Accounts is, to my mind, a conclusion of the witness, it is wholly unwarranted by anything I know, except in cross examination. It probably would be a proper

question for somebody to ask on cross examination as a foundation question, but to ask the witness himself whether, in his opinion, what he had done conformed to some depreciation Code of Accounts, or conformed to the Statutes of the State, or conformed to the Constitution of the United States, is wholly improper.

Mr. Springer: I haven't asked an expert witness for an improper conclusion. He is eminently qualified, and I have asked him whether or not the various definitions he has used in his testimony here are consistent with the precise wording of the definition in the System of Accounts. I can't see anything objectionable about that.

Trial Examiner: Well, of course, it certainly calls for a conclusion on the part of the witness.

Mr. Springer: I think expert witnesses make conclusions constantly, I think that is an accepted fact.

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Mr. Cockley: Not of that kind.

Trial Examiner: It is perhaps true that under the strict rules of evidence the question would be improper. I am satisfied that a good many that have been asked in this proceeding would certainly be; but of course, we don't follow those rules here, and I can't see where any particular harm might result from it.

The objection is overruled.

Mr. Cockley: Exception.

The Witness: Yes.

Mr. Springer: That is all from Mr. Smith at this time.

Mr. Cockley: We reserve the right to cross examine after we have had a chance to examine his testimony in a little more detail, but I would like to ask one or two questions now, that have occurred to me, if I may.

Trial Examiner: Surely.

CROSS EXAMINATION by Mr. Cockley.

Q. Did you assume that Mr. Rhodes, in the determination of accrued depreciation of the Hope Company's property, did or did not give consideration to age of various items of property which he was expressing an opinion about? A. I think, from reading his testimony, that he gave some consideration to age.

Q. And did you answer the questions you did on the

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assumption that he did not know and give weight to the retirement experience of the company, to various classes of property? A. What question are you referring to?

Q. Expressing your general opinion. A. I don't recall giving testimony on Mr. Rhodes' method.

Q. No, but in discussing generally the method of determining the depreciation, in response to questions that were put to you which were said to correctly reflect the method that had been used here, I am asking you whether you did or did not assume that Mr. Rhodes, in this case, knew the retirement experience of the company as to various classes of property? A. I made no assumption as to what Mr. Rhodes did. I did not testify as to Mr. Rhodes' methods. I knew that Mr. Rhodes did have knowledge of the retirement experience, that is quite evident in the statement he filed.

Q. In your comments upon observed depreciation, do I understand that you were not referring to Mr. Rhodes' testimony? A. I was speaking generally of observed depreciation studies.

Q. And you weren't referring specifically to the testimony in this case? A. That is correct.

Q. Now one other question.

—2848—

Mr. French, I believe, was the engineer who made the depreciation study, or determined the service lives of various classes of Hope's property? A. Yes, sir.

Q. Did you instruct him how to do it? A. Mr. French is not under my jurisdiction. I did have conversations with Mr. French, but I gave him no instructions.

Q. You gave him no instructions? A. That is right.

Q. Did you talk it over with him and explain fully your ideas about it, before he went to work? A. No, sir.

Q. You had talks with him about it before? A. I had talks with Mr. French toward the end of his studies, and I have had talks with Mr. French particularly since he prepared his exhibit.

Q. Had he arrived at any judgment as to lives of various classes of properties when you first talked to him? A. Yes, he had.

Q. And were those the lives that he subsequently used? A. Well, he may have made some changes, but he didn't make any changes as a result of my conversations, I am sure.

Q. Generally speaking, they were the lives you think he used? A. That is right.

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Q. Did you give him any directions at all, or discuss with him before he had completed his work, as to the things he should take into consideration in determining the service lives of those properties? A. I gave him no instructions. Toward the end of the investigation, I spent about a half an hour talking to Mr. French in the office of the Hope Natural Gas Company, and at that time we had some general discussion as to the determination of rates, but it was a general discussion only. I can't claim any contribution to Mr. French's study, Mr. Cockley.

Mr. Springer: Would it help you, Mr. Cockley, if I stated that the assignment for determining service lives was an engineering assignment to Mr. French from the division of Gas Engineering, headed by Mr. C. C. Brown; and that the service life determination was applied by men

under the direction of Mr. Smith in computing the depletion and depreciation reserve requirements.

By Mr. Cockley:

Q. Well, your testimony is that you did not discuss with Mr. French, prior to the time he substantially determined these service lives, the elements that he should take into consideration in determining service life, is that right? A. That is correct.

Now, Mr. Cockley, it is quite possible that at some time or other I may have had some conversation with Mr.

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French generally about depreciation matters, but they were no more than conversations that I might have had with any other member of the Commission's staff on that subject.

I don't recall anything specific in regard to that. In other words, I have done a good deal of work on depreciation, a good deal of writing on depreciation, and some of the members of the staff of the Commission occasionally come around and consult me; but I recall nothing specific in that connection relating to Mr. French.

Q. And that same thing is true with reference to other engineers who worked on depreciation? A. That is correct.

Q. Including both the gasoline plant study of Mr. Soyster and anybody else in the engineering department who worked on depreciation? A. That is true. As a matter of fact, I don't believe I have ever met Mr. Soyster.

Mr. Cockley: That is all.

15. **COMPANY'S EXHIBIT NO. 108 ENTITLED: "Photostatic Copy of Certified Copy of the Records of the Board of Public Works of the State of West Virginia Showing the Valuation of the Company's Properties Fixed for Taxation Purposes for the Year 1941" (Not Admitted).**

## ASSESSMENT OF PUBLIC SERVICE CORPORATIONS—1941

The Board took up the consideration of the assessment of the properties of the public service corporations for the purposes of taxation for the year 1941, i.e. water, light and power companies, bridge companies, telegraph and telephone companies, oil and gas companies, express companies, private car line companies, steam railroad companies, street railway companies, bus lines and bus companies, and all other companies doing business in the State of West Virginia, and assessable by The Board of Public Works, and upon a thorough examination of the returns made by said companies, and upon a separate vote of The Board taken upon the valuation in the State of each property assessed, with the right of any member of this Board to have his vote recorded at the time on the assessment of any particular property fixed the valuations of the properties owned by said companies in the State of West Virginia, for the tax-paying year 1941, as hereinafter set forth, and apportioned the same to the counties in which said property is located, as follows:

| County | Class No. 1 (Intangible Personal Property) | Class Nos. 3 & 4 (All other Property) | Total |
|---|---|---|---|
| **Gas, Oil and Pipe Line Companies** | | | |
| Hope Natural Gas Company | | | |
| Barbour | $ 20,600 | $ 265,200 | |
| Boone | 121,500 | 1,566,000 | |
| Braxton | 39,600 | 510,600 | |
| Brooke | 2,500 | 31,500 | |
| Calhoun | 223,300 | 2,877,700 | |
| Clay | 5,800 | 74,200 | |
| Doddridge | 341,200 | 4,398,400 | |
| Gilmer | 258,800 | 3,336,300 | |
| Harrison | 1,142,500 | 14,725,600 | |
| Jackson | 1,000 | 13,800 | |
| Kanawha | 230,400 | 2,969,400 | |
| Lewis | 622,300 | 8,020,300 | |
| Lincoln | 4,600 | 59,800 | |
| Logan | 2,300 | 29,700 | |
| Marion | 214,600 | 2,766,500 | |
| Marshall | 75,700 | 975,100 | |
| Mason | 600 | 7,600 | |
| Mingo | 100 | 1,100 | |
| Monongalia | 61,600 | 794,400 | |
| Nicholas | 17,100 | 220,500 | |
| Ohio | 200 | 2,500 | |
| Pleasants | 42,000 | 541,500 | |
| Preston | 1,100 | 14,300 | |
| Putnam | 400 | 4,500 | |
| Raleigh | 300 | 3,400 | |
| Randolph | — | 200 | |
| Ritchie | 295,900 | 3,814,300 | |
| Roane | 53,600 | 691,500 | |
| Taylor | 11,200 | 144,000 | |
| Tyler | 115,300 | 1,486,000 | |

| | | | |
|---|---|---|---|
| Upshur | 3,500 | 45,600 | |
| Wetzel | 452,000 | 5,826,000 | |
| Wood | 134,200 | 1,728,600 | |
| Wirt | 4,200 | 54,000 | |
| | $4,500,000 | $58,000,000 | $62,500,000 |

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STATE OF WEST VIRGINIA,
OFFICE OF THE SECRETARY OF STATE,
CHARLESTON, SS:

I, Wm. S. O'Brien, Secretary of State and Ex-Officio Secretary of The Board of Public Works, do hereby certify that the foregoing is a true and correct copy of the records of The Board of Public Works as touching the valuation of the properties of the Hope Natural Gas Company in the State of West Virginia for the tax-paying year 1941.

Given under my hand and the Great Seal of the said State, at the City of Charleston, this 3rd day of July, 1941.

WM. S. O'BRIEN,
*Secretary of State and Ex-officio Secretary of The Board of Public Works.*

## 16. COMPANY WITNESS BROWN'S EXHIBIT NO. 19 ENTITLED: "Rate of Return—Written Statement of Percy W. Brown"

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## STATEMENT OF EXPERIENCE AND QUALIFICATIONS OF PERCY W. BROWN

**1. Name, address and age**

Percy W. Brown, 1040 Union Commerce Building, Cleveland, Ohio, age 53.

**2. Education**

Graduated from Harvard University in 1908 with degree of A. B.

**3. Present position**

General partner in the firm of Hornblower & Weeks, brokers and investment dealers, members of the New York, Chicago, Boston and Cleveland Stock Exchanges, and underwriters and distributors of industrial, public utility and railroad bonds and stocks. The firm maintains offices in nine cities: Boston, New York, Chicago, Cleveland, Detroit, Providence, Philadelphia, Portland and Bangor.

**4. Experience**

| | |
|---|---|
| 1909-1910 | Bookkeeper in the Boston office of Hornblower & Weeks. |
| 1910-1916 | Assistant statistician with Hornblower & Weeks. |
| 1916-1922 | Chief statistician of Hornblower & Weeks. |
| 1923 to date | General partner of Hornblower & Weeks; for the past 10 years member of the Executive Committee of the firm and member of the Buying Committee. Since March, 1924, resident partner in charge of the Cleveland office, and 1924-1930 partner in charge of a Pittsburgh office. |

My duties with Hornblower & Weeks have included the constant examination and analysis of many securities, both bonds and stock, the examination of various corpora-

tions with a view to purchasing and selling at retail large blocks of their bonds and stocks based on personal in-



vestigation and report to the other partners, the negotiation for the purchase of blocks of securities running into many millions and participation as a member of the firm in the purchase and sale of numerous security issues in very large amounts, both bonds and stocks, of industrial, utility and other companies.

Attached hereto as Schedule A is a list of the principal bond issues sold in 1938 and 1939 including generally only those issues of $5,000,000 and over. Hornblower & Weeks participated as an underwriter in 35 of the issues there shown and as member of the selling group in 41 additional issues there shown, including the Lone Star Gas debentures and Oklahoma Natural Gas 3¾% bonds shown on Schedules D and E hereto attached. Hornblower & Weeks were also co-underwriters in the public offering in June, 1936, of the first mortgage bonds and the convertible debentures and were members of the selling group for the public offering of the common stock in September, 1936, of the El Paso Natural Gas Company, Schedule G hereto attached.

I am a member of the investment committee of four endowed institutions. I have served as a director in more than 15 corporations with assets ranging from $3,000,000 to $50,000,000. I have been employed a number of times to give testimony in valuation cases for large blocks of securities—bonds, preferred and common stocks, both listed and unlisted; and both widely distributed and closely held. I have participated in various reorganization plans of corporations with a view to readjustment of the capital structure or with a view to getting new capital from the public. I have given advice on the relative merits and investment values of securities to many hundreds of individual investors over a period of more than 29 years.

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## WRITTEN STATEMENT OF PERCY W. BROWN

### A. General Problem

I have been asked by the Hope Natural Gas Company to give my opinion as to what is a fair rate of return to be earned by it on a fair valuation of its natural gas properties.

For this purpose I have examined the income figures and balance sheets of the Company for the past ten years and have studied other material and data as to the history, organization and nature of the business of the Company. I am generally familiar with the territories served by it and have made such study and investigation as seems to me necessary to form a judgment as to the fair rate of return to be earned by it.

In approaching this problem I have assumed that the Federal Power Commission will find the fair value of the natural gas properties of the Company and will allow its necessary operating expenses and charges, including reasonable allowances for depreciation and depletion.

The importance to the general public of an adequate rate of return for public utilities is sometimes overlooked. The interests of every citizen of every community are adversely affected if that community has not adequate and efficient public utility service. Starved utility enterprises are a real detriment in any community, affecting living conditions, business opportunities and property values, among other things.

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The construction and constant extension of efficient public utility enterprises must be financed by the permanent hiring of money, principally through the medium of bonds and stocks. This money comes in part from individual investors and in part through the savings of the public deposited in banks, paid as premiums to insurance companies

or contributions made to educational and philanthropic institutions.

Probably more than half of all our people have a vital interest in having their money hired to utilities at an adequate rate of return. All of them have a direct and vital interest in adequate and efficient utility service in their respective communities.

The problem of a fair rate of return therefore reduces itself to a decision as to the rate at which one large part of the public will be willing to hire its money to public utilities to enable them to serve another part of the public. To insure a steady flow of capital into the building and extension of public utility facilities the utilities must earn a rate of return that the investing public deems fair. If lower rates are prescribed by public authorities than the investing public deems fair they simply will not hire their money to public utilities. Deprived of this the utilities in the end will be unable efficiently to perform their function to the injury of everyone.

More specifically the problem reduces itself to one of what rate of earnings the Hope Natural Gas Company would have to enjoy at the present time on its natural gas

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properties to enable it to replace the money invested in them. This requires a consideration of those factors that the investing public would consider and the terms upon which it would hire its money to the Hope Company.

## B. General Character Of The Hope Natural Gas Company's Business

Investors will only hire their money if they can receive a return commensurate with the risks and opportunities offered.

From the investors' viewpoint the natural gas business is probably the most hazardous of any of the public utilities. It sells a wasting asset. In the past many natu-

ral gas companies have come into existence and then passed out due to a failure of gas reserves. Throughout the Appalachian region gas reserves during the past 40 years have only been maintained by constant exploration and extension of the natural gas fields. The Hope Natural Gas Company itself has found it necessary constantly to extend its transmission system further and further south in West Virginia to bring into its lines either by production or purchase newly discovered fields. So far its business has not suffered appreciably from lack of adequate gas supplies but it is present in the minds of investors that this cannot always continue to be true.

Until recently the securities of manufactured gas companies have been favored by investors over those of natural gas companies for the very reason that the manufactured gas company, making the product it sells, is a much less hazardous undertaking than a natural gas enterprise. The recent change in the public attitude towards the securities of manufactured gas companies has been largely due to the discovery of large reserves of natural gas in



the west and southwest, to the development of long distance transmission lines bringing this gas into what had theretofore been manufactured gas markets, and the low cost of natural gas in comparison with manufactured gas. One million British thermal units of energy can be purchased in the form of natural gas for a fraction of its cost in the form of manufactured gas. Thus recently a hazard not theretofore serious has been introduced into the manufactured gas business in some places due to the fear in the mind of the investing public that natural gas may supplant it.

The natural gas business, however, remains in the mind of the investor as an inherently hazardous enterprise.

Another hazard in the natural gas business is the fluctuation of revenues as a result of general business condi-

tions. Investors know that a large part of the natural gas produced in the United States is used for industrial purposes. In 1938 about .79% of all gas produced in the United States was so used and about 30% of the Hope Natural Gas Company's sales in that year was used for industrial purposes.

In industry natural gas is merely a fuel and in consequence is competitive with other fuels, principally coal and oil. Not only this but where natural gas wins out in this competition the annual sales for industrial use fluctuate from year to year with the rise and fall of general business activity.

While domestic sales fluctuate widely from month to month and indeed from day to day, the average domestic

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consumer tends to purchase about the same amount of gas each year, variations being caused largely by departure from average weather conditions. On an annual basis it is a fairly stable demand. Industrial sales, on the other hand, while they do not vary greatly from week to week, do increase in periods of industrial activity and decline in periods of industrial depression.

The investor, of course, is not interested in the day to day or weekly demands of either domestic consumers or industrial consumers. His interest is in the annual sales out of which he hopes the Company in which he invests will have net earnings with which to pay interest and dividends. Since the total sales of any natural gas company in a year will thus depend in part upon the degree of industrial activity, natural gas securities in the minds of the investors are associated with the risks of non-utility enterprises. If Hope were able economically to sell gas only for domestic consumption it would be regarded by the investing public as a more stable and less speculative enterprise than it now is.

This difference is well illustrated by a comparison of the revenues of the Bell Telephone system and those of the Western Union Telegraph system. The telephone revenues over a long period of years have been remarkably constant due to the fact that so large a part of this business is dependent upon residence subscribers. The revenues of the Western Union Telegraph system, on the other hand, have paralleled more nearly those of manufacturing corporations and its securities are generally regarded by investors as highly speculative.

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A third factor, which would bear directly on the investor's attitude towards the Hope Natural Gas Company is the fact that natural gas production in the Appalachian field has shown no growth in the last 20 years and apparently has passed the peak. The tremendous recent growth in the production of natural gas in this country has been largely in the southwest and west. In 1906, Pennsylvania and West Virginia accounted for about 67% of the total national production, whereas in 1937, those two states accounted for only 11% of the total. California, Louisiana, Oklahoma and Texas, which together produced only a little over 1% in 1906, in 1937 accounted for about 75%. The extension of pipe lines from southern fields to densely populated areas, such as Detroit and Chicago, has been notable. That the trend in natural gas production in the Appalachian field is not upward is shown by the following table (from Moody's Manual of Public Utilities, 1939), in millions of cubic feet:

| | United States | W. Virginia | Penna. | Ohio | Kentucky |
|---|---|---|---|---|---|
| 1915 | 628,000 | 244,000 | 113,000 | 79,000 | 1,000 |
| 1920 | 798,000 | 239,000 | 125,000 | 58,000 | 3,000 |
| 1925 | 1,188,000 | 180,000 | 101,000 | 43,000 | 16,000 |
| 1930 | 1,943,000 | 144,000 | 88,000 | 63,000 | 28,000 |
| 1935 | 1,916,000 | 115,000 | 94,000 | 49,000 | 39,000 |
| 1937 | 2,447,000 | 149,000 | 115,000 | 42,000 | 55,000 |

From an investor's viewpoint the Hope Natural Gas Company does not have possibilities of growth and therefore its securities would be less attractive than, for example, the securities of El Paso Natural Gas Company which has, through expansion of its properties, shown a substantial increase in both gross and net earnings during the past several years. This is well illustrated by the following table which shows gross revenue and net earnings after depreciation per books (million $):



| | Hope (from natural gas business) | | El Paso | |
|---|---|---|---|---|
| | Gross Revenue | Net | Gross Revenue | Net |
| 1929 | 22.0 | 3.0 | | (Not available) |
| 1930 | 19.9 | 1.0 | 1.2 | 0.28 |
| 1931 | 18.0 | 0.6 | 1.5 | 0.33 |
| 1932 | 14.2 | 0.9 (decifit) | 1.3 | 0.19 |
| 1933 | 14.1 | 0.3 | 1.3 | 0.25 |
| 1934 | 16.0 | 0.9 | 2.0 | 0.33 |
| 1935 | 17.0 | 2.1 | 2.3 | 0.42 |
| 1936 | 20.1 | 3.4 | 3.2 | 1.07 |
| 1937 | 20.4 | 1.9 | 4.6 | 1.89 |
| 1938 | 16.9 | 0.5 | 4.9 | 2.08 |
| 1939 | (Not available) | | 5.8 | 2.35 |

Further details of El Paso Natural Gas Company are shown in Schedule G.

These fluctuations in revenues plus the declining trend of production in West Virginia plus the fact that for a few days in 1940 many industrial consumers dependent on the Hope Natural Gas Company for a supply were curtailed to conserve the supply for domestic users indicate to the investor declining rather than increasing sales for the Hope Natural Gas Company over any considerable future period.

As a practical matter the net earnings of the Hope Natural Gas Company from the natural gas business during recent years, as shown by its books, would prove a substantial obstacle in any refinancing of its properties. Unless earnings increased and stabilized, it would be difficult to sell common shares to the public except at a high yield. However, in approaching the problem of fixing a

fair and reasonable rate of return, I have assumed that the Commission will permit the Company a volume of net earnings from its natural gas business sufficient to support a sound capital structure equivalent to the fair valuation of its natural gas properties.

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An investor would, of course, give consideration to the fact that the markets in which the Hope Natural Gas Company's product is distributed is in a thickly populated, well developed and growing industrial section of the country. This insures a continuous market for both domestic and industrial uses probably as long as adequate service can be maintained. This background of continued population and business growth in the minds of the investors would tend to give confidence in the Company's position and stability.

To some small extent an investor would take into account (and I have taken into account in the conclusions set forth) the fact that the Hope Company is a subsidiary of Standard Oil Company (New Jersey), a company which for many years has enjoyed the highest reputation from the standpoint of management, quality of production, and general efficiency of operation. In each of the plans for replacing the capital invested in these natural gas properties I have assumed that the parent company would retain a sufficient part of the equity securities to preserve working control and continue responsibility for the management of the properties.

**C. Present Security Market Conditions**

Since the matter under consideration is the fair rate of return at the present time, a brief consideration of market conditions during the past several years is appropriate. During that time we have witnessed an unprecedented low-yield money market, which has been due, in large measure, to a combination of circumstances which in-

cludes the large influx of gold, the excessive bank reserves,

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the low rate of building construction and other factors. The following table shows the average yield of 40 public utility bonds (taken from Moody's Bond Survey) classified as to Moody ratings of quality.

| | 1938 | | 1939 | |
|---|---|---|---|---|
| | High | Low | High | Low |
| 40 bonds (average) | 4.23% | 3.61% | 3.76% | 3.37% |
| Aaa | 3.15 | 2.90 | 3.22 | 2.79 |
| Aa | 3.47 | 3.07 | 3.39 | 2.91 |
| A | 4.17 | 3.71 | 3.80 | 3.36 |
| Baa | 6.24 | 4.73 | 4.74 | 4.35 |

How long this low-yield market for bonds of various qualities, high and medium grade, will continue cannot be forecasted, but it is my judgment that eventually the yields on higher grade bonds will return to a normal level around 4%, and bonds rated at medium grade will find a level around 5%. This opinion is based on the reasonable expectation that natural and normal forces will eventually prevail over any artificial or temporary forces or situations.

However, the conclusions which follow are not based upon the assumption that more normal money yields will soon prevail, but take into consideration the situation as it exists, and as it has existed for the past two years.

In general, it may be said that except for a few weeks in the second half of 1939, when the approaching European crisis, the declaration of war, and the uncertainty following it, affected the markets for new securities, for the past two years the market for new security flotations of the higher grade bonds and investment quality preferred stocks was reasonably good. The market for equities (common stocks) has been a highly selective one.

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According to the Commercial & Financial Chronicle (January 6, 1940) the domestic corporate issues floated were as follows:

| | Bonds & Notes | Preferred Stock | Common Stock | Total |
|---|---|---|---|---|
| 1936 | $4,026,041,600 | $270,840,364 | $282,063,717 | $4,578,945,681 |
| 1937 | 1,673,283,500 | 468,395,208 | 292,013,451 | 2,433,692,159 |
| 1938 | 2,042,783,895 | 78,560,510 | 17,837,784 | 2,139,182,189 |
| 1939 | 1,870,622,000 | 161,058,178 | 67,692,867 | 2,099,373,045 |

Security sales for new capital during 1939 were 17.4% of the total as against 40.8% in 1938 and the balance was for refunding purposes. During 1939 there were 128 issues involving $717,836,500 placed privately with institutional investors. The larger public utility issues sold during 1938 and 1939 appear on Schedule A.

## D. A Fair Rate Of Return For The Hope Natural Gas Company Is Not Less Than 8%

Considering all the factors, the principal of which have previously been stated, it is my opinion that investors would not at the present time provide the capital for the natural gas business of the Hope Natural Gas Company unless it was allowed and was earning at least 8% upon whatever is determined to be the fair value of its natural gas properties.

I have tested this opinion by considering various possible capital structures that might be set up for the Company and the earnings that would be necessary to service the securities of such capital structures with a reasonable provision for surplus. They are as follows:

### *1. Refinancing on the basis of 100% common stock issue*

The Hope Natural Gas Company is primarily a producer, purchaser from producers and exporter of natural gas. All the companies to which it sells have other sources



from which a part of their supplies are procured. Its business is therefore more speculative than that of any of the distributing companies to which it sells. Investors would

consider it to be in much the same category as a mining industrial enterprise for which the appropriate financial structure is all common stock.

The company bearing the closest similarity to the Hope Natural Gas Company is the National Fuel Gas Company which operates in the same general part of the country and has generally corresponding risks and uncertainties. (See Schedule B). National Fuel Gas Company has but one class of securities, namely no par common stock. This is also true of Interstate Natural Gas Company (Schedule C). The organizers of the Hope Natural Gas Company recognized this as the appropriate financial structure for Hope which has only common stock outstanding.

The advantages of having a capital structure of all common stock for a mining enterprise is that the Company is relieved of fixed obligations. In bad years it will have no defaults and its directors are less likely to pass or reduce dividends in such a period. Directors of such a company with no fixed obligations may safely pay up to 80% of its earnings each year in dividends, carrying the remainder to surplus.

If Hope Natural Gas Company were refinanced on the basis of 100% common stock this could not be sold to the public on the basis of a yield of less than 6½%. An underwriting syndicate to distribute this common stock to the public would be necessary. Assuming the stock to be sold



to the public at par, the underwriting syndicate would purchase such an issue at a price not greater than 96, or 4 points less than the selling price to the public.

Assuming such a refinancing the resulting capital structure, the net cost of this issue to the Company and the return which the Company would have to earn on each $100 of value for which the common shares were issued would therefore be as follows:

| | |
|---|---|
| Dividend 6.50% plus 4 points | 6.770% |
| Surplus | 1.692 |
| | 8.462% |

On this basis the Company would have to earn $8.46 per year on each $100 fair value of its property in order to maintain a 6½% dividend and make a reasonable provision for surplus. Unless earnings permitted such a provision to be made for surplus the common stock could not be sold on a 6½% basis. Paying this dividend it would be required to distribute 80% of its net earnings.

For yields expected by investors in common stocks of natural gas companies see Schedules B, C, D, E and G.

*2. Refinancing on a basis of 40% preferred and 60% common stock*

It is possible that a part of the capital requirements of the Hope Natural Gas Company could be raised by an issue of preferred stock under conditions now prevailing. If so, such a preferred stock issue could not be sold to advantage if it represented more than 40% of the total capital requirements. It might be possible at the present time to attract the public to such an issue of preferred stock, at par, yielding the investor 5½%. The balance of the capital requirements, or 60%, would be raised by the sale of common stock. In view, however, of the fact that



this common stock would be junior to 40% of preferred stock it would be necessary to sell the common stock at a yield to the investor of not less than 7%. Assuming these securities to be sold to the public at par the underwriting syndicate necessary for their distribution would purchase at prices of not more than 97 for the preferred stock and not more than 96 for the common stock.

The resulting capital structure, the net cost of these issues to the Company and the return which the Company

would have to earn on each $100 of value would therefore be as follows:

| | Per cent of capital | Net dividend cost to the Company | Per cent of earnings on each $100 fair value required to service the securities |
|---|---|---|---|
| 5½% Preferred stock | 40% | 5.670% | 2.268% |
| 7% Common Stock | 60 | 7.291 | 4.374 |
| Surplus | | | 1.458 |
| Total return required | | | 8.100% |

It will be observed that this capital structure requires the Company to earn $8.10 annually on each $100 fair value of its property. Such earnings would provide a coverage for the preferred stock dividend of about 3½ to 1, which coverage would certainly be necessary to enable the underwriters to sell a 5½% preferred stock at par. The common stock dividend would be earned 1⅓ times and this coverage is necessary to enable the 7% common stock to be sold at par. The provision for surplus is as low as can reasonably be made in view of the necessity for allowing for fluctuations in earnings due to business conditions or to rising costs, wages, materials, etc. Such provision also conforms to the sound business principle that ¾ of the net



earnings available for common stock dividends is the maximum that should be paid out on such a stock where it is junior to a preferred stock.

For yields expected by investors in preferred stocks of natural gas companies see Schedules E, F and G.

*3. Refinancing on basis of 30% bonds and 70% common stock*

Both the capital structures heretofore considered are sounder from a business point of view than one involving the issuance of bonds. With only common stock, there is no danger that failure to earn bond interest during periods of adversity will result in foreclosure or receivership and

substantial impairment or loss of the equity in the property. With a senior security consisting of preferred stock the situation is not as ideal, since accruing unpaid preferred dividends create rights which may affect the company's finances and ability to secure additional capital for many years. Nevertheless, the preferred dividends can be omitted during adverse times without endangering the enterprise as a whole. For these and other reasons, financing in part through a bond issue is not a desirable procedure, particularly for a company such as the one under consideration.

Nevertheless it is probable that at the present time some part of the capital requirements of this Company could be raised through the sale of bonds. As a final test I have therefore assumed a capital structure which includes bonds. If these bonds are to be sold to yield a low return to the investor they must, of course, be well secured and the interest on them must be earned many times over. In my



opinion on property of this nature 30% of bonds is as large a part of the capital as can be raised by their sale, the balance, or 70%, to be raised from the sale of common stock.

In my opinion an issue of 15-year first mortgage bonds of the Hope Natural Gas Company, secured by all its natural gas property, would rate not higher than Baa, Moody's Rating. At best it would be a medium grade bond. In view of all the factors previously outlined these bonds would bear a coupon rate of not less than 4%. The remainder of the capital would be raised through the sale of 7% common stock. Assuming the price of these securities to the public to be par, the underwriting syndicate would purchase the bonds at a price of not more than 98, which would give it a 2 point spread or $20 per $1,000 on the bonds, and the common stock at a price of not more than 96, which allows a 4 point spread.

The resulting capital structure, the net cost of these issues to the Company and the return which the Company would have to earn on each $100 of value of its property would therefore be as follows:

| | Per cent of Capital | Net interest and dividend cost to the Company | Per cent of earnings on each $100 fair value required to service the securities |
|---|---|---|---|
| 4% Mortgage bonds | 30% | 4.181% | 1.254% |
| 7% Common stock | 70 | 7.291 | 5.103 |
| Surplus | | | 1.701 |
| Total return required | | | 8.058% |



Even by running the risks of fixed charges and procuring the lower cost money represented by 4% bonds it will be seen that in order to refinance its property the Company would need to earn a little more than $8 on each $100 of fair value. The interest on the bonds would be earned more than 6 times which is necessary to make them marketable at the prices fixed. The dividends on the common stock would be earned 1⅓ times which is necessary to its sale. Here again the Company would be paying out either in interest or dividends almost 80% of its net earnings, which is slightly more than a company with outstanding bonds should distribute.

For return expected by investors in the bonds of natural gas companies see Schedules E, F, G, H, I and J.

**E. Summary**

Having tested the rate of return by three possible capital structures we find that these vary from 8.46% return to 8.06% return. All of them indicate a return of above 8% as necessary to this enterprise. It is my opinion that securities to refinance these natural gas properties could not be sold if the return were less than 8% and that the fair rate of return for the natural gas properties of the Hope Natural Gas Company at the present time is not less than 8%.

SIGNED at Cleveland, Ohio, this April 29, 1940.

PERCY W. BROWN

BOSTON
NEW YORK
CHICAGO
CLEVELAND

# HORNBLOWER & WEEKS

ESTABLISHED 1888

Members of the New York, Boston, Chicago, Cleveland, Philadelphia and Detroit Stock Exchanges and the New York Curb Exchange

SCHEDULE A
DETROIT
PROVIDENCE
PHILADELPHIA
PORTLAND, ME.
BANGOR, ME.

## BONDS ISSUED IN 1938 AND 1939

JANUARY 8, 1940

| Offered | Ratings Moody | Ratings Standard | Millions | Issue | Original Offering Price | Approx. Market Jan. 8, 1940 | Yield to Maturity |
|---|---|---|---|---|---|---|---|
| Feb 2, 38 | A | A | 57 | Appalachian Elec. Power 1st, 4, 1963 | 98¾ | x111½ | 3.30% |
| Feb 2, 38 | Baa | B1 + | 10 | Appalachian Elec. Power Deb. 4½, 1948 | 100½ | x107¼ | 3.55 |
| Nov 3, 38 | A | A | 25 | Argentine Republic 4½, 1948 | 95½ | * 94¼ | 5.31 |
| Sep 15, 38 | A | A1 | 25 | Atlantic Refining Deb. 3, 1953 | 99 | *106 | 2.47 |
| Jun 27, 39 | A | A | 25 | Bethlehem Steel Mtge. 3¼, 1959 | 99 | *100½ | 3.22 |
| Nov 27, 38 | Aa | A1 + | 40 | Canada (Dominion of) 3, 1968 | 97¼ | * 88½ | 3.65 |
| Oct 24, 38 | B | B | 2.5 | Carrier Corp. Conv. Deb. 4½, 1948 | 100 | 89½ | 6.01 |
| Jun 20, 39 | Baa | B1 + | 14.7 | Central Illinois Elec. & Gas 3¼, 1964 | 100½ | 100 | 3.75 |
| Dec 8, 38 | A | A | 38 | Central Illinois P. S. 1st 3¼, 1968 | 100½ | 103¾ | 3.54 |
| Dec 8, 38 | Ba | B1 | 10 | Central Illinois P. S. Deb. 3¼-4, 1939/48 | Var. | 101a | 3.86a |
| Aug 17, 39 | Baa | B1 + | 25 | Central Power & Light 3¼, 1969 | 101 | 101¾ | 3.65 |
| Aug 17, 39 | Ba | B1 | 7 | Central Power & Light 1½-3, 1940/6 | Var. | 99a | 3.15a |
| Mar 28, 38 | Ba | B1 + | 5.5 | Champion Paper & Fibre 4¾, 1950 | 99½ | *102½ | 4.46 |
| Dec 12, 38 | Aa | A1 | 30 | Chesapeake & Ohio Ry. 3½, 1963 | 101½ | *106 | 3.14 |
| Jun 1, 38 | A | A | 42 | Commonwealth Edison, Cv, 3½, 1958 | 100s | *127¼ | 1.80 |
| Jun 1, 38 | Aa | A1 | 33 | Commonwealth Edison 1st 3½, 1968 | 102¼ | *110 | 2.97 |
| Aug 25, 38 | Aa | A1 | 33 | Commonwealth Edison 1st 3½, 1968 | 103½ | *110 | 2.97 |
| Sep 2, 38 | A | A | 39 | Commonwealth Edison, Cv, 3½, 1958 | 100s | *127¼ | 1.80 |
| Mar 10, 39 | Baa | A | 6.6 | Community Public Service 1st 4, 1964 | 100 | 104¾ | 3.71 |
| Jan 13, 38 | Aa | A1 | 30 | Consolidated Edison, N. Y. 3½, 1958 | 101¾ | *108½ | 2.92 |
| Apr 21, 38 | Aa | A1 | 60 | Consolidated Edison, N. Y. 3½, 1948 | 101¾ | *107 | 2.63 |
| Jun 8, 39 | Aaa | A1 + | 7 | Consolidated Gas Baltimore 3, 1969 | 105 | x108 | 2.62 |
| Dec 23, 38 | Aa | A1 | 10.1 | Consumers Power Co. 1st 3¼, 1966 | 104½ | *106½ | 2.90 |
| Jan 19, 38 | Aa | A1 | 9 | Consumers Power Co. 1st 3½, 1967 | 102 | *108¾ | 3.03 |
| Dec 2, 38 | Baa | A1 | 21 | Continental Oil Co. Cv, 2¾, 1948 | 100s | *108¾ | 1.70 |
| Jul 7, 38 | Ba | B1 + | 10 | Crown Cork & Seal, Deb. 4½, 1948 | 99 | *103 | 4.10 |
| Aug 24, 38 | Baa | B1 + | 10 | Crucible Steel Co. Deb. 4½, 1948 | 99¼ | *103½ | 4.03 |
| Mar 30, 38 | Aa | A1 | 28 | Duluth, Missabe & I. R. Ry. 3½, 1962 | 98 | *106¾ | 3.08 |
| Sep 18, 39 | B | B1 | 1.6 | Durez Plastics & Chemicals 4½, 1949 | 100 | 106¼ | 3.75 |
| Oct 26, 38 | A | A | 50 | Firestone Tire & Rubber 3½, 1948 | 99½ | *106 | 2.73 |
| Apr 24, 39 | Baa | A | 52.5 | Gatineau Power 1st A, 3¼, 1969 | 98¼ | 89 | 4.41 |
| Jun 28, 39 | A | A | 27.3 | Gulf States Utilities 1st 3½, 1969 | 106¾ | *108½ | 3.07 |
| Jun 6, 39 | Ba | B1 | 10 | Houston Oil Co. Deb. 4¼, 1954 | 100 | * 98 | 4.42 |
| Aug 5, 38 | A | A | 32 | Indianapolis Power & Lt. 3¼, 1968 | 100 | x109¼ | 3.25 |
| Jul 20, 38 | Ba | B1 + | 7.5 | Industrial Rayon Corp. 1st 4½, 1948 | 99 | *102½ | 4.16 |
| Dec 5, 39 | Ba | B | 5.9 | Inspiration Cons. Copper Cv. 4, 1952 | 100s | 100 | 4.00 |
| Aug 8, 39 | Baa | B1 + | 14.2 | Iowa Public Service 3¼, 1969 | 101 | 101½ | 3.67 |
| Jul 14, 39 | Baa | B1 + | 5 | Kansas Power Co. 1st 4, 1964 | 101½ | 101¾ | 3.88 |
| Jul 26, 39 | Aa | A1 | 26.5 | Kansas Power & Light 3½, 1969 | 108½ | 111¼ | 2.93 |
| Aug 25, 38 | A | A1 | 20 | Lone Star Gas Deb. 3½, 1953 | 102 | *108¼ | 2.77 |
| Dec 29, 39 | A | A | 30 | Louisville & Nashville Coll. 3½, 1950 | 101 | 101½ | 3.33 |
| Dec 29, 39 | A | A | 30 | Louisville & Nashville Coll. 4, 1960 | 100½ | 102¾ | 3.81 |
| Oct 6, 38 | A | A | 34 | Michigan Cons. Gas 1st 4, 1963 | 97½ | *101¾ | 3.89 |
| May 23, 39 | Baa | B1 + | 9 | Montana Dakota Utilities 4½, 1954 | 101 | 107¼ | 3.86 |
| Jun 9, 38 | Aa | A1 + | 30 | Mountain States Tel. & Tel. 3¼, 1968 | 102 | *108¼ | 2.83 |
| Mar 21, 39 | Baa | B1 + | 22.5 | National Distillers Cv. Deb. 3½, 1949 | 100½ | *104¼ | 3.00 |
| Apr 25, 39 | A | A1 | 50 | National Steel 1st Coll. 3, 1965 | 99 | *102¾ | 2.85 |
| Jun 28, 39 | A | A | 13 | N. Y. State Elec. & Gas 3¼, 1964 | 102 | 105¾ | 3.41 |
| Aug 12, 38 | Aa | A1 | 27.9 | N. Y. Steam Corp. 1st 3½, 1963 | 100 | *105¼ | 3.18 |
| Feb 1, 39 | A | A | 20 | North American Co. Deb. 3½, 1949 | 101¾ | *106 | 2.80 |
| Feb 1, 39 | A | A | 25 | North American Co. Deb. 3¾, 1954 | 101 | *106 | 3.23 |
| Feb 1, 39 | A | A | 25 | North American Co. Deb. 4, 1959 | 101¼ | *107¾ | 3.47 |
| Dec 14, 39 | Baa | B1 + | 45 | Northern Ind. Pub. Svc. 1st 3¼, 1969 | 100 | 100 | 3.75 |
| Mar 22, 38 | Aa | A1 | 17.5 | Northern States Pwr. (Wis.) 1st 3½, 1964 | 106 | 111 | 2.88 |
| Oct 20, 38 | Aa | A1 | 55 | Ohio Power Co. 1st 3¼, 1968 | 101½ | x108 | 2.84 |
| Aug 17, 39 | Baa | B1 + | 17 | Oklahoma Nat. Gas 3¼, 1955 | 103½ | x107½ | 3.15 |
| Aug 9, 39 | A | A | 95 | Penn. Power & Lt. 1st 3½, 1969 | 105½ | *108¾ | 3.05 |
| Aug 9, 39 | Baa | B1 + | 28.5 | Penn. Power & Lt. Deb. 4½, 1974 | 104 | *108¾ | 4.03 |
| Dec 20, 39 | A | A1 | 10.9 | Penn. Water & Power Coll. 3¼, 1964 | 104 | 105½ | 2.94 |
| Aug 19, 38 | Aa | A1 | 25 | Phillips Petroleum Cv. 3, 1948 | 100s | *111 | 1.73 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Jun 28, 39 | A | A | 27.3 | Gulf States Utilities 1st 3½, 1969 | 106¾ | •108½ | 3.07 |
| Jun 6, 39 | Ba | B1 | 10 | Houston Oil Co. Deb. 4¼, 1954 | 100 | • 98 | 4.42 |
| Aug 5, 38 | A | A | 32 | Indianapolis Power & Lt. 3¼, 1968 | 100 | x109¼ | 3.25 |
| Jul 20, 38 | Ba | B1 + | 7.5 | Industrial Rayon Corp. 1st 4½, 1948 | 99 | •102½ | 4.16 |
| Dec 5, 39 | Ba | B | 5.9 | Inspiration Cons. Copper Cv. 4, 1952 | 100s | 100 | 4.00 |
| Aug 8, 39 | Baa | B1 + | 14.2 | Iowa Public Service 3¼, 1969 | 101 | 101½ | 3.67 |
| Jul 14, 39 | Baa | B1 + | 5 | Kansas Power Co. 1st 4, 1964 | 101½ | 101¾ | 3.88 |
| Jul 26, 39 | Aa | A1 | 26.5 | Kansas Power & Light 3½, 1969 | 108½ | 111¼ | 2.93 |
| Aug 25, 38 | A | A1 | 20 | Lone Star Gas Deb. 3½, 1953 | 102 | •108¼ | 2.77 |
| Dec 29, 39 | A | A | 30 | Louisville & Nashville Coll. 3½, 1950 | 101 | 101½ | 3.33 |
| Dec 29, 39 | A | A | 30 | Louisville & Nashville Coll. 4, 1960 | 100½ | 102¾ | 3.81 |
| Oct 6, 38 | A | A | 34 | Michigan Cons. Gas 1st 4, 1963 | 97½ | •101¾ | 3.89 |
| May 23, 39 | Baa | B1 + | 9 | Montana Dakota Utilities 4½, 1954 | 101 | 107¼ | 3.86 |
| Jun 9, 38 | Aa | A1 + | 30 | Mountain States Tel. & Tel. 3¼, 1968 | 102 | •108¼ | 2.83 |
| Mar 21, 39 | Baa | B1 + | 22.5 | National Distillers Cv. Deb. 3½, 1949 | 100½ | •104¼ | 3.00 |
| Apr 25, 39 | A | A1 | 50 | National Steel 1st Coll. 3, 1965 | 99 | •102¾ | 2.85 |
| Jun 28, 39 | A | A | 13 | N. Y. State Elec. & Gas 3¼, 1964 | 102 | 105¼ | 3.41 |
| Aug 12, 38 | Aa | A1 | 27.9 | N. Y. Steam Corp. 1st 3½, 1963 | 100 | •105¼ | 3.18 |
| Feb 1, 39 | A | A | 20 | North American Co. Deb. 3½, 1949 | 101¾ | •106 | 2.80 |
| Feb 1, 39 | A | A | 25 | North American Co. Deb. 3¾, 1954 | 101 | •106 | 3.23 |
| Feb 1, 39 | A | A | 25 | North American Co. Deb. 4, 1959 | 101¼ | •107¾ | 3.47 |
| Dec 14, 39 | Baa | B1 + | 45 | Northern Ind. Pub. Svc. 1st 3¾, 1969 | 100 | 100 | 3.75 |
| Mar 22, 38 | Aa | A1 | 17.5 | Northern States Pwr. (Wis.) 1st 3½, 1964 | 106 | 111 | 2.88 |
| Oct 20, 38 | Aa | A1 | 55 | Ohio Power Co. 1st 3¼, 1968 | 101½ | x108 | 2.84 |
| Aug 17, 39 | Baa | B1 + | 17 | Oklahoma Nat. Gas 3¾, 1955 | 103½ | x107½ | 3.15 |
| Aug 9, 39 | A | A | 95 | Penn. Power & Lt. 1st 3½, 1969 | 105½ | •108¾ | 3.05 |
| Aug 9, 39 | Baa | B1 + | 28.5 | Penn. Power & Lt. Deb. 4½, 1974 | 104 | •108¾ | 4.03 |
| Dec 20, 39 | A | A1 | 10.9 | Penn. Water & Power Coll. 3¼, 1964 | 104 | 105½ | 2.94 |
| Aug 19, 38 | Aa | A1 | 25 | Phillips Petroleum Cv. 3, 1948 | 100s | •111 | 1.73 |
| Nov 27, 39 | A | A | 40 | Public Service Colorado 1st 3½, 1964 | 102 | 104½ | 3.22 |
| Nov 27, 39 | Baa | B1 + | 12.5 | Public Service Colorado Deb. 4, 1949 | 102 | 106¼ | 3.26 |
| Oct 19, 38 | Aa | A1 | 80 | Public Service Co. No. Ill., 3½, 1968 | 103 | •109 | 3.02 |
| Aug 11, 38 | Aaa | A1 + | 10 | Public Service Elec. & Gas 3¼, 1968 | 104¾ | •111¼ | 2.69 |
| Dec 7, 39 | Baa | B1 + | 38 | Public Svc. Indiana 1st 4, 1969 | 102 | 102 | 3.89 |
| Dec 7, 39 | Ba | B1 | 10 | Public Svc. Indiana Deb. 3¾, 1940/49 | 97½a | 97½a | 4.20a |
| Dec 22, 38 | Aaa | A1 + | 16 | Railway Express Agency 3/8-2½, 1948 | 100 | 104½ | 1.95a |
| Jun 21, 39 | Aa | A1 | 8.3 | Rochester Gas & Elec. 3¼, 1969 | 105½ | •107½ | 2.88 |
| May 26, 38 | A | A | 16.5 | San Antonio Pub. Svc., 4, 1963 | 99 | •107¾ | 3.52 |
| Jul 19, 39 | Aa | A1 | 85 | Shell Union Oil Corp, 2½, 1954 | 97¾ | • 95¾ | 2.85 |
| Jun 28, 39 | Aaa | A1 + | 50 | Socony Vacuum Oil 3, 1964 | 104 | •105¼ | 2.73 |
| Jul 20, 39 | Aa | A1 + | 25 | Southern Bell Tel. & Tel. 3, 1979 | 107½ | •105 | 2.78 |
| Jul 14, 38 | Aaa | A1 + | 30 | Southwestern Bell Tel., 3, 1968 | 100 | •107¾ | 2.62 |
| Dec 21, 39 | Baa | A | 6.7 | Southwestern Lt. & Pw. 1st 3¼, 1969 | 102 | 103½ | 3.56 |
| Jul 7, 38 | Aaa | A1 + | 50 | Standard Oil Co., N. J., 2¾, 1953 | 99 | •105 | 2.32 |
| Jul 7, 38 | Aaa | A1 + | 35 | Std. Oil Co., N. J., 1¾-2½, 1943/47 | 100 | 103a | 2.08a |
| Aug 16, 39 | A | A | 7 | Term. R. R. St. Louis 3¾, 1974 | 102 6 | 98¾ | 3.43 |
| Apr 12, 39 | Aaa | A1 + | 40 | Texas Corp. Deb. 3, 1959 | 101 | •105¼ | 2.67 |
| Aug 10, 38 | Aa | A1 | 30 | Toledo Edison Co. 1st 3½, 1968 | 101½ | 108¼ | 3.07 |
| Aug 10, 38 | Baa | B1 + | 6.5 | Toledo Edison Co. Deb. 4, 1948 | 100¾ | 104½ | 3.41 |
| Aug 15, 39 | A | A1 | 30 | Union Oil California 3, 1959 | 103 | •102¼ | 2.85 |
| Jun 2, 38 | A | A1 | 100 | U. S. Steel Corp. Deb. 3¼, 1948 | 100 | •106 | 2.50 |
| Oct 5, 38 | Aa | A1 | 37.5 | Virginia Elec. & Power 3½, 1968 | 103½ | •110 | 2.97 |
| Jun 28, 39 | A | A1 | 22 | Washington Water Power 3½, 1964 | 105 | 108 | 3.03 |
| Jun 6, 39 | A | B1 + | 18 | West Texas Utilities 1st 3¼, 1969 | 101¾ | 104 | 3.52 |
| Dec 5, 39 | A | A | 8 | West Va. Pulp & Paper 1st 3, 1954 | 99 | 99½ | 3.04 |
| Oct 25, 38 | Aa | A1 | 55 | Wisconsin Electric Power 3½, 1968 | 103½ | •109 | 3.02 |
| Sep 8, 38 | Baa | B1 + | 30 | Youngstown Sheet & Tube Cv. 4, 1948 | 100 | •109¼ | 2.82 |

* Traded N. Y. Stock Exchange. x Traded N. Y. Curb. s Offered to Stockholders. a Longest Maturity.

We have participated in the distribution of most of these issues and will furnish on request more detailed information and prospectus on any of them which you may be interested in buying or selling. This list is not to be construed as an offering which is made by the Prospectus only.

## CURRENT AVERAGE BOND YIELDS

The following are the ratings of three well known Investors' Services and their description of them. These ratings are intended to indicate the relative investment quality in bonds. The average yields shown are derived from recent prices of over one hundred representative issues.

| Standard | | Fitch | | Utility | Industrial | Railroad | Average | Moody § |
|---|---|---|---|---|---|---|---|---|
| A1 + | Highest Grade | AAA | Maximum Safety | 2.74% | 2.51% | 3.37% | 2.87% | Aaa |
| A1 | High Grade | AA | Very High Grade | 2.91 | 2.80 | 3.54 | 3.08 | Aa |
| A | Sound | A | High Grade | 3.44 | 3.51 | 4.42 | 3.79 | A |
| B1 + | Good | BBB | Good Grade | 4.38 | 4.21 | 5.81 | 4.80 | Baa |

§—Explanation of Moody's Ratings will be forwarded on request.

*The statistics in this circular are obtained from sources which we believe to be accurate. We do not own or offer any of these securities.*

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Schedule B

## NATIONAL FUEL GAS COMPANY

A holding company controlling natural gas producing, transmission and distribution properties in a well-developed area in Pennsylvania, New York, eastern Ohio and Ontario, including Buffalo and Jamestown, N. Y. Industrial sales are less than 15% of total, and about 40% of combined manufactured and natural gas requirements is purchased. Rockefeller Foundation owns 22% of common and other large holdings are identified with Rockefeller interests.

Capital Stock: 3,810,183 shares (no par).

**Income statistics (Million $)**

| | Gross Revenue | Net Revenue | Earnings Per Share |
|---|---|---|---|
| 1934 | 15.80 | 4.78 | 1.26 |
| 1935 | 15.75 | 3.81 | 1.00 |
| 1936 | 14.71 | 4.54 | 1.19 |
| 1937 | 13.86 | 3.66 | 0.96 |
| 1938 | 13.19 | 3.21 | 0.83 |
| 1939 | 13.65 | 3.63 | 0.95 |

Has been paying $1 dividends on common which rate while not fully earned in 1937, 1938 and 1939, the management has indicated a willingness to continue for a considerable period of time. The Company has a very strong cash position with net working capital on Dec. 31, 1939 of $11,229,000 including cash items of $10,280,000. The average price for the stock during the past two years has been 12 to 13 at which figure the yield is approximately 8%.

On February 15, 1940 an investment banking firm announced the sale of a block of 15,670 common shares at $12.50 per share to yield 8%.

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Schedule C

## INTERSTATE NATURAL GAS CO., INC.

Produces and sells at wholesale. Owns 54,000 acres in the Monroe (Louisiana) field and 170 miles of 22-inch main pipe line together with compressor stations and field lines. The pipe line extends to Baton Rouge. Standard Oil owns 53.97% of the stock. Other stock interests include Rockefeller Foundation and Columbian Carbon Co.

Capital Stock: 952,953 shares (no par).

**Income Statistics (Million $)**

| | Gross Revenue | Net | Earnings Per Share | Dividend Per Share |
|---|---|---|---|---|
| 1936 | 5.2 | 1.7 | 1.82 | 1.75 |
| 1937 | 5.8 | 2.3 | 2.50 | 2.60 |
| 1938 | 5.5 | 2.0 | 2.13 | 1.75 |
| 1939 | — | — | — | 2.00 |

| | Price Range | Average Price | Dividend Yield |
|---|---|---|---|
| 1936 | 33—20½ | 26¾ | 6.54% |
| 1937 | 33½—17 | 25¼ | 10.29% |
| 1938 | 25—17½ | 21¼ | 8.23% |
| 1939 | 27—22 | 24½ | 8.16% |

Schedule D

## LONE STAR GAS CORP.

Through subsidiaries, this company produces, purchases, transmits and distributes natural gas chiefly in Texas with extensions in Oklahoma. A subsidiary also operates in Council Bluffs, Iowa, and the company has a 30% interest in a pipe line to Minneapolis. Natural gas reserves are substantial.

### Debt and Capital Issues

| | |
|---|---|
| 3½% Convertible Debentures | $20,000,000 |
| Bank loans | 8,750,000 |
| Common (no par) | 5,529,747 shares |

### Income Statistics (Million $)

| | Gross Revenue | Net | Earnings Per Share |
|---|---|---|---|
| 1934 | 16.3 | 4.1 | $0.59 |
| 1935 | 17.6 | 5.1 | 0.77 |
| 1936 | 20.1 | 6.2 | 0.97 |
| 1937 | 21.0 | 6.8 | 1.14 |
| 1938 | 19.5 | 5.3 | 0.88 |

| | Common Price Range | Average Price | Dividend | Dividend Yield |
|---|---|---|---|---|
| 1934 | 8⅜ — 4¼ | 6.31 | * | |
| 1935 | 10⅞ — 4½ | 7.69 | $0.30 | 3.89% |
| 1936 | 14¼ — 9⅞ | 12.06 | 0.60 | 4.98% |
| 1937 | 14¼ — 5¼ | 9.75 | 0.60 | 6.15% |
| 1938 | 10⅜ — 6⅝ | 8.50 | 0.60 | 7.05% |
| 1939 | 10½ — 7⅛ | 8.81 | 0.70 | 7.95% |

* In convertible preferred stock.

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Schedule E

## OKLAHOMA NATURAL GAS CO.

Primarily a distributing company purchasing most of its gas under long-term contracts and serving eastern Oklahoma, including Tulsa and Oklahoma City. The load is chiefly (77%) residential and commercial.

### Debt and Capital Issues

| | |
|---|---|
| First 3¾—1955 | $17,000,000 |
| Bank loans | 8,000,000 |
| $5.50 Cumulative Convertible Preferred | 5,800,000 |
| $3 Cumulative Preferred ($50 par) | 4,552,500 |
| Common ($15 par) | 549,986 shares |

### Income Statistics (Million $)

| | Gross Revenue | Net for Dividends | $5.50 Pref.* | $3 Cum. Pref.* | Common* |
|---|---|---|---|---|---|
| 1934 | 6.58 | 0.3 | — | 3.41 | 0.07 |
| 1935 | 6.92 | 0.6 | — | 6.36 | 0.58 |
| 1936 | 7.57 | 0.9 | #41.89 | 8.78 | 0.95 |
| 1937 | 8.13 | 1.6 | #71.10 | 15.91 | 2.13 |
| 1938 | 7.96 | 1.4 | #64.26 | 14.23 | 1.86 |
| 1939 | 8.29 | 1.6 | 27.94 | 14.30 | 1.87 |

* per share.

# based on 6% Prior Preferred which was redeemed October, 1939. No common dividends until 1939—now paying $1.

$16,814,000 4½'s-1951 were sold in June 1936 at 98½ and were refunded in 1939 by the first 3¾'s-1955.

The 5½% convertible preferred was sold in October, 1936 at 100.

In 1939 the net earnings available for interest charges on the 3¾'s-1955 were over 5 times requirements.

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### Price Ranges

| | | 1939 | 1938 |
|---|---|---|---|
| 4½ | Bonds 1951 | 106¼-104¾ | 106 -96 |
| 3¾ | Bonds 1955 | 107⅞-103⅝ | — |
| 5½% | Conv. Preferred | 113 -106 | 105¾-89 |
| $3 | Preferred | 49 - 35 | 41½-21½ |
| — | Common | 19⅞- 8⅞ | 14¼- 6¾ |

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Schedule F

## COLUMBIA GAS & ELECTRIC CORP.

A leading natural gas system serving through subsidiaries industrial areas chiefly in Ohio and Western Pennsylvania. Electric subsidiaries, located principally in Ohio, bring in about 30% of gross revenues.

### Debt and Capital Issues

| | |
|---|---|
| Subsidiary | $ 77,559,000 |
| Parent Co. | 104,450,900 |
| Subsidiary Stocks | 50,179,928 |
| $6 Cumulative Preferred | 94,066,400 |
| $5 Cumulative Preferred | 3,869,500 |
| $5 Cumulative Preference | 12,166,800 |
| Common (No Par) | 12,223,256 shares |

### Income Statistics (Million $)

| | Gross Revenue | Net for Dividends | Combined Pfd.* | $5 Pref.* | Common* |
|---|---|---|---|---|---|
| 1934 | 77.4 | 9.8 | 9.98 | 17.76 | 0.25 |
| 1935 | 81.2 | 11.9 | 12.20 | 27.45 | 0.43 |
| 1936 | 90.9 | 13.2 | 13.50 | 33.52 | 0.53 |
| 1937 | 98.6 | 13.6 | 13.86 | 63.48 | 0.57 |
| 1938 | 93.0 | 10.2 | 10.45 | 36.00 | 0.31 |

* per share.

The company derives about two-thirds of its revenue from natural gas. The 41 principal subsidiaries are nearly all 100% owned through common stock ownership. Being chiefly a holding company, Columbia's securities have a lower investment rating although well protected by assets and earnings.

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### Price Range

| | 1939 | 1938 |
|---|---|---|
| Debenture 5s May 1952 | 104¼-92½ | 99 -86 |
| Debenture 5s April 1952 | 104¼-92¾ | 98 -86 |
| Debenture 5s 1961 | 104¼-92¾ | 96¼-85 |
| Preferred (6%) | 91 -74½ | 83 -57 |
| Preferred (5%) | 83 -62½ | 70 -50 |
| Preference (5%) | 74¾-55½ | 70 -47¼ |
| Common | 9 - 5¼ | 9⅞-5⅛ |

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Schedule G

## EL PASO NATURAL GAS CO.

A wholesale pipe line company which purchases its supply from the Lea County Field in New Mexico. Latter has estimated reserves sufficient for 40 years. Pipe lines to El Paso, Tucson and Phoenix sell gas chiefly to public utilities (46%) and copper companies (42%) under long-term contracts.

### Debt and Capital Issues

| | |
|---|---|
| Funded debt | $6,000,000 |
| Notes 1940-45 | 3,750,000 |
| $7 Cumulative Preferred (Par $100) | 14,797 shares |
| Common (Par $3) | 601,594 shares |

### Income Statistics (Million $)

| | Gross Revenue | Net | Per Share Common |
|---|---|---|---|
| 1934 | 2.03 | 0.33 | 0.91 |
| 1935 | 2.33 | 0.42 | 1.20 |
| 1936 | 3.23 | 1.07 | 1.76 |
| 1937 | 4.68 | 1.89 | 3.00 |
| 1938 | 4.92 | 2.08 | 3.30 |
| 1939 | 5.88 | 2.35 | 3.73 |

| | Common Price Range | Average Price | Dividend | Dividend Yield |
|---|---|---|---|---|
| | | | | (Initial div. |
| 1936 | 29¼—22¾ | 26.00 | 0.40 | Dec. 29, 1936) |
| 1937 | 29 —14½ | 21.75 | 2.00 | 9.91 |
| 1938 | 29⅞—17 | 23.43 | 2.00 | 8.53 |
| 1939 | 42¾—28 | 35.37 | 2.00 | 5.65 |

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In September, 1936, a syndicate of investment bankers purchased from private investors and sold to the public 60,000 shares of common stock at $20 per share. The underwriters were allowed $1 per share or 5%. The capital structure at that time consisted of $11,038,000 bonds, $1,479,700 7% cumulative preferred stock and 408,558 shares of common stock, which at $20 per share made an aggregate of

$6,171,180 common stock. The first mortgage 4½% bonds due 1951 were quoted at 101½ (yielding about 4.36%). The 7% preferred stock was then quoted at 106 (yielding about 6.60%). The company was showing a sharply rising trend in gross operating revenue and net income. In January, 1939, the bonds were retired and a new issue of $6,000,000 first mortgage 15-year 3½'s due December 1, 1953 were sold privately to six institutional investors at 98½ to yield about 3.63%. The preferred stock is unlisted but during 1939 broker's bids ranged from 105½ to 111¼. At the year end 109½ was bid at which figure the yield was 6.39%.

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Schedule H

## NORTHERN NATURAL GAS CO.

Purchases, produces, transmits and distributes natural gas principally at wholesale in Iowa, Kansas, Nebraska, South Dakota and Minnesota. Cities supplied at wholesale include Omaha and Lincoln, Nebraska, Council Bluffs, Des Moines and Sioux City, Iowa, and Minneapolis and Rochester, Minnesota. Supply comes from Texas Panhandle and Kansas. Purchases most of its requirements. Stock is all owned by Lone Star Gas Corp., North American Light & Power Co. and United Light & Railways Co.

In August, 1939 an issue of $16,000,000 1st mortgage and 1st lien 3¼'s-1954 was sold privately at par.

| | Gross | Net for Interest |
|---|---|---|
| 1935 | $7,952,000 | $2,810,000 |
| 1936 | 9,037,000 | 3,019,000 |
| 1937 | 9,775,000 | 3,660,000 |
| 1938 | 9,959,000 | 3,521,000 |

Interest charges on the new bonds, $520,000.

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Schedule I

## SOUTHERN NATURAL GAS CO.

Purchases gas from producers mostly in Louisiana. Reorganized in October 1935 under terms of Section 77B of Bankruptcy Act.

### Debt and Capital Issues

| | |
|---|---|
| Funded debt | $19,326,523 |
| Bank loans | 1,475,000 |
| Common (Par 7½) | 691,970 shares |

### Income Statistics (Million $)

| | Gross Revenue | Net for Interest | Net for Dividends |
|---|---|---|---|
| 1937 | 7.0 | 2.6 | 1.39 |
| 1938 | 6.8 | 2.2 | 1.03 |

The $12,939,000 first 4½'s-1951 were sold at par in November, 1936.

### Bond Price Range

| 1939 | 1938 | 1937 |
|---|---|---|
| 106⅜—100¾ | 102—91 | 101½—94½ |

About 48% of the common is owned by Federal Water Service Corp. No dividend until June 30, 1939.

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Schedule J

## NORTH PENN GAS CO.

Distributes gas in Pennsylvania and New York and through subsidiaries produces gas.

### Debt and Capital Issues

| | |
|---|---|
| Funded Debt | $3,450,000 |
| $7 Prior Preferred | 631,200 |
| $7 Preferred | 1,316,000 |
| Common | 100,000 shares |

### Income Statistics (Million $)

| | Gross Revenue | Net for Interest |
|---|---|---|
| 1935 | 2.3 | 0.55 |
| 1936 | 2.5 | 0.57 |
| 1937 | 2.6 | 0.54 |
| 1938 | 2.5 | 0.44 |

Common and preferred all owned by Penna. Gas & Electric.

The 5½% bonds due 1957 are callable at 105 to May 1, 1937 and ¼% less each November 1 thereafter.

### Bond Price Range

| 1939 | 1938 | 1937 | 1936 | 1935 |
|---|---|---|---|---|
| 107¼—102½ | 106—102 | 106½—102½ | 106½—101 | 105½—100 |

## 17. COMPANY WITNESS COFFMAN'S EXHIBIT NO. 27 ENTITLED: "Investors' Appraisal of Comparative Risks of Capital in the Natural Gas Business, 1937-1939—Written Statement of Paul B. Coffman"

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## STATEMENT OF EXPERIENCE AND QUALIFICATIONS OF PAUL B. COFFMAN

**1. Name, address and age**

Paul B. Coffman, 345 Hudson Street, New York City; age 39.

**2. Education**

Graduate of Ohio State University in 1923, with degree of B. S. Graduate of Harvard University, Graduate School of Business Administration, 1926, with degree of M.B.A.

**3. Present position**

Vice-President of Standard Statistics Company, Inc., a corporation engaged, among other things, in gathering, collating, analyzing and disseminating, on both a printed and personal advisory basis, statistical and general information on all phases of business, industry and investments.

**4. Experience and qualifications**

1926-1927: Professor of Economics at the College of William and Mary, Williamsburg, Virginia.

1927-1936: Professor of Accounting and Business Policy at the Graduate School of Business Administration at Harvard University; consulting economist for a number of industrial corporations and financial advisory institutions; during 1931 and 1932 Executive Vice-President and General Manager of Poor's Publishing Company of New York City, a firm which is engaged in a business similar to that of Standard Statistics Company, Inc. and publishes Poor's Manuals.

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1935-1939: Departmental Manager of Standard Statistics Company, Inc., having charge of statistical and research investigation and valuations.

1939 to date: Vice-President of Standard Statistics Company, Inc., directly in charge of statistical and economic research and valuation for individuals, institutional and corporate clients.

Duties with Standard Statistics Company, Inc., have included the constant examination and analyses of many situations involving all kinds of securities and various corporations with a view to determining the hazards involved and the intrinsic worth of the securities based upon personal investigation and analysis, and the presentation of the findings to the many clients of Standard Statistics Company, Inc.

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## WRITTEN STATEMENT OF PAUL B. COFFMAN

### 1. Purpose Of This Exhibit

In March of this year, Standard Statistics Company, Inc. was retained by the Hope Natural Gas Company to make a statistical study for the years 1937, 1938 and 1939 of the investors' appraisal of the risks of capital invested in the natural gas business as compared with the risks of capital invested in other utility industries. The analysis covered the following utility classifications, namely, (1) electric utility operating companies, (2) water companies, (3) manufactured and mixed gas companies and (4) natural gas companies.

This exhibit is a statement of the result of that investigation. The working papers on which it is based are available for inspection by all parties to the present proceedings.

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### 2. Method Of Procedure

A group of companies in each of the utility classifications was selected on bases which will be described below. Statement E at pages 26 to 33 of this exhibit contains a general description of the business of each of the companies and the territory in which it operates.

The general method of procedure as to each company and group of companies involved four steps, as follows:

(1) The indicated total market value of all of the securities of a single company was determined by taking the sum of the amounts produced by multiplying the number of each class of security (bonds, preferred and common stocks as the case may be) outstanding at the end of each year by the average of its high and low market quotations in that year.

*Example:*

**Indicated Market Value of the Securities Outstanding of the Boston Edison Company for 1939**

| | Capital Outstanding Dec. 31, 1939 | 1939 Market Prices | | | Indicated Market Value |
|---|---|---|---|---|---|
| | | High | Low | Average | |
| Capital Stock ($100 par) | 617,164 shs. | 160 | 127 | 143.50 | $ 88,563,034 |
| 1st Mortgage Bonds Series A, 3½'s, '65 | $53,000,000 | 112½ | 103½ | 108 | 57,240,000 |
| | | | | Total | $145,803,034 |

(2) Next there was determined for the individual company the total earnings available for distribution to these securities after taxes, depreciation and



all other miscellaneous charges as reported in the particular company's published annual report to stockholders.

*Example:*

The consolidated earnings of the Boston Edison Company for 1939 available for its capital after taxes, depreciation and all other miscellaneous charges, as shown in the published report to its stockholders for 1939, was $7,297,587.

(3) The earnings so determined under (2) were then divided by the indicated market value of all securities as determined under (1) and a rate for the year was thus obtained.

*Example;*

In the case of the Boston Edison Company for 1939, dividing the consolidated earnings available for capital, in the amount of $7,297,587, as shown above, by the indicated market value of all capital of $145,803,034, gives a percentage of 5.01 per cent, which, in my opinion, fairly indicates the investors' appraisal of the risks of capital employed in that enterprise for the year 1939.

(4) Having determined in the manner described above the investors' appraisal of the risks of capital employed in each company selected, the indicated market value of all the companies in each group, determined under (1) above, was added to obtain the indicated market value of the capital securities of the entire group. Similarly, the earnings available for distribution to the securities of each of the companies, as determined under (2) above, were added to obtain the total earnings available for distribution to securities of the entire group. The



latter figure was then divided by the former in order to obtain the investors' overall appraisal of the risk of all capital in the group. This was done for each of the years 1937, 1938 and 1939.

*Example:*

**Determination of Investors' Appraisal of Risks of Capital for Electric Operating Utility Companies as a Group**

| | Indicated Market Value of Capital | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| Boston Edison Company | $ 140,377,138 | $ 132,313,981 | $ 145,803,034 |
| Commonwealth Edison Company | 627,713,979 | 659,945,351 | 705,040,810 |
| Consolidated Edison Co. of New York, Inc. | 1,081,937,457 | 1,021,974,547 | 1,101,280,966 |
| Consolidated Gas, Electric Light & Power Co. of Baltimore | 185,161,844 | 173,973,927 | 192,758,869 |
| Detroit Edison Company | 296,761,357 | 276,549,713 | 303,425,025 |
| Pacific Gas & Electric Company | 638,039,237 | 634,253,084 | 673,724,413 |
| Southern California Edison Company, Ltd. | 343,044,455 | 325,193,494 | 332,597,011 |
| Total | $3,313,035,467 | $3,224,204,097 | $3,454,630,128 |

| | Earnings Available for Distribution to Capital | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| Boston Edison Company | $ 7,505,886 | $ 7,163,506 | $ 7,297,587 |
| Commonwealth Edison Company | 39,294,881 | 39,006,579 | 41,254,094 |
| Consolidated Edison Co. of New York, Inc. | 52,797,146 | 53,893,205 | 55,643,286 |
| Consolidated Gas, Electric Light & Power Co. of Baltimore | 9,162,762 | 8,316,215 | 9,240,571 |
| Detroit Edison Company | 15,898,965 | 13,841,099 | 15,685,727 |
| Pacific Gas & Electric Company | 37,322,975 | 35,976,977 | 38,214,304 |
| Southern California Edison Company, Ltd. | 19,146,425 | 19,019,797 | 19,480,429 |
| Total | $ 181,129,040 | $ 177,217,378 | $ 186,815,998 |
| Investors' Appraisal of Risks of Capital | 5.47%* | 5.50%* | 5.41%* |

Note: (*) Obtained by dividing "Earnings Available for Distribution to Capital" by "Indicated Market Value of Capital."



## 3. Analysis of Data On Electric Utility Operating Companies

All utility operating companies upon which Standard Statistics Company, Inc. currently publishes data in Standard Earnings Bulletin were first listed. These were the

more important utility operating companies in which there was substantial investment interest. From this list there were excluded all companies whose operations were not predominantly in the electric field. The resulting list included the following companies:

Boston Edison Company
Commonwealth Edison Company
Consolidated Edison Co. of New York, Inc.
Consolidated Gas, Electric Light & Power Co. of Baltimore
Detroit Edison Company
Pacific Gas & Electric Company
Southern California Edison Company, Ltd.

For each of these companies and for the group of companies, for each of the years 1937, 1938 and 1939, the investors' appraisal of the risks of capital as a percentage was obtained by application of the method fully described in Section 2 above.

The actual results of these determinations to the group of electric utility operating companies are presented in the following table:

**Determination of the Investors' Appraisal of the Risks of Capital for Electric Utility Operating Companies**

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| Total Indicated Market Value of Capital | $3,313,035,467 | $3,224,204,097 | $3,454,630,128 |
| Total Earnings Available for Indicated Capital | 181,129,040 | 177,217,378 | 186,815,998 |
| Investors' Appraisal of Risks of Capital | 5.47% | 5.50% | 5.41% |



In other words, this analysis indicated that investors appraised the risk of capital invested in electric operating utility companies as a group in 1937, 1938 and 1939, respectively, at 5.47 per cent, 5.50 per cent and 5.41 per cent, or an average for the three years of 5.46 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures

for the group, are presented in Statement A at page 21 of this exhibit.

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**4. Analysis of Data on Water Companies**

A list of all operating companies engaged solely in the water business was first prepared from Standard Corporation Records. From this list companies were eliminated for the following reasons:

1. Companies whose common stocks were held by one of the larger holding companies, such as American Water Works & Electric Company, Inc., the Federal Water Service Corporation and the Community Water Service Company, and whose stocks had no obtainable market evaluation.
2. Companies whose stocks were closely held by relatively few individuals and had no available market evaluation.
3. Companies whose 1939 gross operating revenues were less than $500,000. This latter class was not deemed of sufficient importance to be included in the study.

The result of these eliminations in the over-all list was the following group of companies:

Bridgeport Hydraulic Company
Elizabethtown Water Co. Consolidated
Hackensack Water Company
Middlesex Water Company
New Haven Water Company
Plainfield-Union Water Company
Stamford Water Company

The method of determining the investors' appraisal of the risks of capital in this division of the utility industry was the same as that previously described in Section 2 above.

The actual results of these determinations for the group of water companies are presented in the following table:

**Determination of Investors' Appraisal of Risks of Capital for Water Company Securities**

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| Total Indicated Market Value of Capital | $79,947,987 | $76,395,996 | $79,414,304 |
| Total Earnings Available for Indicated Capital | 4,410,457 | 4,114,122 | 4,495,678 |
| Investors' Appraisal of Risks of Capital | 5.52% | 5.39% | 5.66% |

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In other words, this analysis indicated that investors appraised the risk of capital invested in water companies as a group in 1937, 1938 and 1939, respectively, at 5.52 per cent, 5.39 per cent and 5.66 per cent, or an average for the three years of 5.52 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures for the group are presented in Statement B at page 22.

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**5. Analysis of Data on Manufactured and Mixed Gas Companies**

A list was prepared of all operating companies distributing manufactured or mixed gas and listed in Standard Corporation Records. From this list companies were elimininated for the following reasons:

1. Companies which did not have stocks outstanding in the hands of the public and for which there was no market evaluation.
2. Companies whose gross revenue was predominantly obtained from services other than the distribution of manufactured and/or mixed gas.
3. Companies which were in receivership at the end of 1939. Figures of such companies would not be comparable or representative.
4. Companies with gross revenues in 1939 of less than $1,000,000, because these were too small to have any important bearing on the final results.

After giving effect to these eliminations, the following companies remained in the list:

Bridgeport Gas Light Company
Brooklyn Union Gas Company
Elizabethtown Consolidated Gas Company
Hartford Gas Company
Laclede Gas Light Company
Peoples Gas Light & Coke Company
Providence Gas Company
Seattle Gas Company
Springfield (Mass.) Gas Light Company
Washington Gas Light Company

The method of determining the investors' appraisal of the risks of capital in this division of the utility industry was that previously described in Section 2 above.

The actual results of these determinations for the group of manufactured and mixed gas companies are presented in the following table:

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**Determination of the Investors' Appraisal of the Risks of Capital for Manufactured and Mixed Gas Companies**

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| Total Indicated Market Value of Capital | $279,745,945 | $245,431,786 | $262,282,318 |
| Total Earnings Available for Indicated Capital | 17,266,576 | 16,235,071 | 17,342,623 |
| Investors' Appraisal of Risks of Capital | 6.17% | 6.61% | 6.61% |

In other words, this analysis indicated that investors appraised the risk of capital invested in manufactured and mixed gas companies in 1937, 1938 and 1939, respectively, at 6.17 per cent, 6.61 per cent and 6.61 per cent, or an average for the three years of 6.46 per cent.

Supporting data on each of the companies mentioned and for each of the years studied, as well as total figures for the group, are presented in Statement C at page 23.

## 6. Analysis of Data on Natural Gas Companies

A list was prepared of all operating and holding companies engaged in any phase of the natural gas business. From this there were eliminated:

1. Companies which had no stocks outstanding in hands of the public and no obtainable market evaluation of their stocks.
2. Companies which were not exclusively engaged in the natural gas business.
3. Companies in receivership at the end of 1939.

After giving effect to these eliminations, the following companies remained:

Duquesne Natural Gas Company
El Paso Natural Gas Company
Houston Natural Gas Corporation
Interstate Natural Gas Company, Inc.
Lone Star Gas Corporation
Memphis Natural Gas Company
Mountain Fuel Supply Company
National Fuel Gas Company
Northern Oklahoma Gas Company
Northern Utilities Company
Oklahoma Natural Gas Company
Pacific Lighting Corporation
Southern Natural Gas Company

The procedure followed in determining the investors' appraisal of the risks of capital in this division of the utility industry was that previously described in Section 2 above.

The actual results of these determinations for the group of natural gas companies are presented in the following table:

**Determination of the Investors' Appraisal of the Risks of Capital for Natural Gas Companies**

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| Total Indicated Market Value of Capital | $461,156,640 | $420,658,527 | $446,994,750 |
| Total Earnings Available for Indicated Capital | 36,488,033 | 32,757,549 | 33,658,297 |
| Investors' Appraisal of Risks of Capital | 7.91% | 7.79% | 7.53% |

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In other words, this analysis indicated that investors appraised the risk of capital invested in natural gas companies in 1937, 1938 and 1939, respectively, at 7.91 per cent, 7.79 per cent and 7.53 per cent, or an average for the three years of 7.74 per cent.

Included in the above group of natural gas companies is Pacific Lighting Corporation. This company, through subsidiaries, distributes natural gas to 272 cities and towns in Southern California, including Los Angeles. Its subsidiaries serve about half the population of the state. Market prices of the securities of these operating companies are not available. In the absence of these, this holding company was treated as a single operating company in the above group. As a result, its indicated market value is nearly 40 per cent of that of the entire group of natural gas companies.

This gives entirely too much weight in the above table to a purely distributing company. Pacific Lighting Corporation owns no gas producing facilities. It does not run any of the risks of a producing and transporting company as does the Hope Natural Gas Company. It purchases its gas from independent oil and gas producers operating in the immediate territory served by it, where the actual and potential reserves are the greatest in its history.

For these reasons, the risks of capital employed in this company more nearly approximate those of strictly distributing companies serving manufactured or mixed gas. Comparison of the investors' evaluation of the risks of this

company as compared with the risks in the manufactured and mixed gas companies set forth above is as follows:

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**Comparison of Investors' Appraisal of Risks of Capital in Pacific Lighting Corporation as Compared with the Manufactured and Mixed Gas Companies Group**

| | 1937 | 1938 | 1939 | Three Year Average |
|---|---|---|---|---|
| Pacific Lighting Corporation | 7.20% | 7.35% | 6.26% | 6.94% |
| Manufactured and Mixed Gas Companies Group | 6.17% | 6.61% | 6.61% | 6.46% |

As a test, in the following table all figures for the Pacific Lighting Corporation are eliminated, and with this elimination the figures for the 12 natural gas companies remaining in the group are as follows:

**Determination of the Investors' Appraisal of the Risks of Capital for Natural Gas Companies (Excluding Pacific Lighting Corporation)**

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| Total Indicated Market Value of Capital | $294,414,969 | $263,667,801 | $275,217,638 |
| Total Earnings Available for Indicated Capital | 24,488,305 | 21,213,539 | 22,902,944 |
| Investors' Appraisal of Risks of Capital | 8.32% | 8.05% | 8.32% |

In other words, when figures for the Pacific Lighting Corporation are eliminated from the group of natural gas companies, investors appraised the risk of capital invested in the remaining natural gas companies in 1937, 1938 and 1939, respectively, at 8.32 per cent, 8.05 per cent, and 8.32 per cent, or an average for the three years of 8.23 per cent.

Any inference from the summary figures given above for all natural gas companies that the investors' appraisal of the risk is decreasing is caused solely by the Pacific Lighting Corporation figures, which dropped from 7.20 per cent and 7.35 per cent in the years 1937 and 1938, respec-

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tively, to 6.26 per cent in 1939. The above figures for the rest of the natural gas industry show no decline in the in-

vestors' appraisal of the risk which remained constantly above 8 per cent.

For the reasons set forth, it is concluded that the last table of figures presented above more nearly approximates the investors' appraisal of the risks of capital in the natural gas industry as a whole than does the preceding table which includes Pacific Lighting Corporation.

Supporting data on each of the natural gas companies mentioned and for each of the years studied, as well as total figures for the group, are presented in Statement D at page 24.

Although plausible reasons might be given for the elimination of several of the smaller companies included in the final table of natural gas companies, if this were done no substantial change in the results would be made. This is clearly indicated by Statement D-1 at page 25.

## 7. Summary of Analyses

The foregoing analyses indicate most clearly that the percentages representing the investors' appraisal of the risks of capital invested in the various divisions of the utility industry analyzed, increased as the risks of the particular utility division increased. In order that this may be seen clearly, the summary figures are presented as follows:

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**Investors' Appraisal of Capital Risk in Various Divisions of the Utility Business**

| | 1937 | 1938 | 1939 | Three Year Average |
|---|---|---|---|---|
| Electric Utility Operating Companies | 5.47% | 5.50% | 5.41% | 5.46% |
| Water Companies | 5.52 | 5.39 | 5.66 | 5.52 |
| Manufactured and Mixed Gas Companies | 6.17 | 6.61 | 6.61 | 6.46 |
| All Natural Gas Companies | 7.91 | 7.79 | 7.58 | 7.74 |
| All Natural Gas Companies Excluding Pacific Lighting Corporation | 8.32 | 8.05 | 8.32 | 8.23 |

The above table clearly shows that in 1937, 1938 and 1939, investors appraised the risk of manufactured and mixed gas companies as a group at approximately 1 per cent higher, and the risk of natural gas companies as a group at 2 per cent to 2½ per cent higher, than the risk of electric operating companies and water companies.

SIGNED at New York, New York, this May 22, 1940.

PAUL B. COFFMAN.

## 18. COMPANY WITNESS COFFMAN'S EXHIBIT NO. 27-A ENTITLED: "Investors' Appraisal of Comparative Risks of Capital in the Natural Gas Business, 1940 (Supplement to Exhibit No. 27)"

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# WRITTEN STATEMENT OF PAUL B. COFFMAN

## 1. Purpose of this Exhibit

The purpose of this exhibit is to bring up-to-date, through the inclusion of data for 1940, a previous exhibit dated May 22, 1940, entitled "Investors' Appraisal of Comparative Risks of Capital in the Natural Gas Business, 1937-1939" which was prepared for the Hope Natural Gas Company.

## 2. Summary of Analyses

A summary of the findings covering the year 1940 and the average for the four years 1937-1940, both inclusive, as compared with data presented previously covering each of the years 1937, 1938 and 1939, and the three year average 1937-1939, both inclusive, is presented in the following table. The method of computing the data for 1940 was exactly the same as for previous years.

**Investors' Appraisal of Capital Risk in Various Divisions of the Utility Business**

| | 1937 | 1938 | 1939 | Three Year Average 1937-1939 | 1940 | Four Year Average 1937-1940 |
|---|---|---|---|---|---|---|
| ric Utility Operating npanies | 5.47% | 5.50% | 5.41% | 5.46% | 5.43% | 5.45% |
| r Companies | 5.52 | 5.39 | 5.66 | 5.52 | 5.23 | 5.45 |
| ufactured and Mixed Gas npanies | 6.17 | 6.61 | 6.61 | 6.46 | 6.88 | 6.57 |
| atural Gas Companies | 7.91 | 7.79 | 7.53 | 7.74 | 7.97 | 7.80 |
| atural Gas Companies luding Pacific Lighting poration | 8.32 | 8.05 | 8.32 | 8.23 | 9.34 | 8.51 |

—2—

The above table shows conclusively that, for 1940, investors continued to appraise the risk of natural gas companies as a group at a rate considerably higher than for the other divisions of the utility industry studied, namely, manufactured and mixed gas companies, water companies and electric utility operating companies.

On the basis of averages for the four years 1937-1940, both inclusive, the risk of natural gas companies, as demonstrated by the investors' appraisal of all outstanding capital obligations, averaged approximately 2 per cent higher than for manufactured and mixed gas companies, and approximately 3 per cent higher than for electric operating companies and water companies.

SIGNED at New York, New York this July 3, 1941.

PAUL B. COFFMAN.

## 19. TESTIMONY OF COMPANY WITNESS PERCY W. BROWN AS TO PRESENT AND HISTORICAL RATE OF RETURN, WEDNESDAY, JULY 9, 1941, RECORD PAGES 5200 TO 5229

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Mr. Cockley: Mr. Brown, will you take the stand?

Whereupon, PERCY W. BROWN, called as a witness on behalf of the Hope Natural Gas Company, having been previously sworn, was examined and testified as follows:

Trial Examiner: The stipulation with respect to the correction of the record for the last preceding series of sessions is approved by the Trial Examiner, and will be incorporated into the record of these proceedings.

(The stipulation of corrections will be found at the end of today's transcript.)

Trial Examiner: You may proceed with the examination of the witness.

DIRECT EXAMINATION by Mr. Cockley.

Q. Mr. Brown, you testified previously in this case as to the present day rate of return for the Hope Company, did you not? A. Yes, in June, 1940, in Clarksburg, West Virginia.

Q. And am I correct that your testimony at that time was directed to your opinion as to the fair rate of return to be applied to the present fair value of the property of the Hope Company? A. You are correct.

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Q. Now since you testified before, the Commission has introduced, through Mr. Knapp, a 3-volume exhibit which is marked Exhibit 82, 82-A and 82-B in this case. I should like to inquire whether, in view of the voluminous information contained in those volumes, you want in any re-

spect to modify or change the testimony that you gave in June of 1940? A. No, I do not. The statistical information in Mr. Knapp's exhibits with reference to bond prices, preferred stock prices and common stock prices, and ratios, is extremely interesting and bears out the figures which I have. As a matter of fact, all that information was available to me and was given due consideration. I think the exhibit is an extremely capable and far-reaching one, but at the same time I wouldn't want to be understood as agreeing to all the information in it as being necessary. Some of it is a little superfluous, such as Federal re-discount rates, prime commercial paper rates, and so forth.

Q. Now aside from this exhibit, Mr. Brown, have any other matters come to your attention between the time you testified before, that would either confirm or cause you to modify the opinion you expressed at that time as to the fair rate of return to the Hope Company for the present and the near future time? A. Yes, there has been one very significant event that has taken place this summer, the almost complete refinancing of a major natural gas enterprise, the Southern Natural Gas Company.

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Q. Will you tell us about that? A. The two prospectuses are dated June 6, 1941, one covering $13,000,000 first 3½ percent bonds due 1956, which were sold to the public at 103, and netted the company 101¼. $4,500,000—2½ percent serial notes, sold presumably to the banks at par, and 234,868 shares of common stock offered to stockholders at $12.50 a share, with no underwriting other than the commitment of the parent company, the Federal Water Service Corporation, which agreed to purchase any stock not subscribed for by the stockholders, thus netting the company $12.50 per share.

The stockholders of record June 13, 1941, were given the right to subscribe for new shares in the ratio of one-fifth of one share for each share held, and the warrants

will expire September 15, 1941. The notes were sold to four banks, presumably at par.

Thus, all classes of securities are being issued to the public at the present time, that is, June, 1941, and up to September 15, 1941.

The depreciated book value of the properties was estimated as of December 31, 1940, at $30,979,000, which makes the mortgage in effect about 41.9 per cent. The bonds carry a Moody rating of A, and the interest on these bonds is being earned over 7 times.

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Thus, $13,000,000 of bonds at 101¼ makes $13,162,500; $4,500,000 of notes at par makes $4,500,000; 1,409,212 shares of common stock, the full amount outstanding, at $12.50 per share, makes $17,615,150; or a grand total of $35,277,650.

The net income or the past 4¼ years, after taxes and depreciation, is as follows:

1937—$2,478,652.
1938—$2,329,074.
1939—$2,799,244.
1940—$3,071,786.

And for the 12 months ending March 31, 1941—$3,087,638.

Most of the money was used for refunding purposes, but there are some $7,000,000 of new money, namely, $4,800,000 from the sale of this block of stock going on at the present time, plus a block of stock which was put out last January and February in 1941, of 482,374 shares, and I have given no weight to the earning power of this new money, of approximately $7,000,000.

But taking the picture as it stands today, $35,277,000 cost of the money and $3,087,000 of earnings, gives an earnings price ratio of 8.75 percent.

I might say that the prices at which these securities were sold were approved by the Securities and Exchange Commission.

And I think that is a very significant piece of financial

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history, as it is the most complete refinancing of a natural gas property in my recollection.

Q. Well, would that cause you in any respect to change the opinion you expressed before as to the fair rate of return for the Hope Company? A. No, it would not.

Q. Mr. Brown, since you testified in the former case, I have asked you to make such investigation as was necessary in order to form an opinion as to the rate of return which the Hope Company could reasonably expect to receive in the past at the various times at which it constructed or purchased property in its present plant. And I would like to inquire whether you have made such an investigation, and whether you are prepared to testify on that subject? A. I have and I am.

Q. Now will you state whether you have determined what you consider an appropriate rate of return for money invested by Hope in its plant for each year since the beginning, or have made some division of the entire period? A. Well, my investigation led me to make four divisions. It seems that the history of the Hope Company falls into four natural divisions—

Mr. Springer: (Interposing) I object to this line of inquiry. I don't see the relevancy of it. I would like to have a statement of the purpose of this type of testimony,

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the rate of return being a current problem.

Mr. Cockley: I would be very glad at this point, Mr. Examiner, because there are no secrets about this and no mystery, and I would be very glad to advise both the Examiner and counsel the purpose of it.

We put in evidence of reproduction cost new of this property, and depreciated, as bearing upon the present fair value of the property. As we all know, there have been a lot of changes upward in price levels since this property began to be constructed in 1898, and that is one way of reflecting the increased value of property that has occurred by reason of those changes in price levels when that property was constructed particularly prior to World War No. 1, as much of the Hope property was.

And we also, through Mr. Brown, introduced testimony as to what the present fair rate of return on that property was.

Now the Power Commission's staff has come in with what they say is an original cost, a depreciated original cost. I shall not argue at the present time that what they claim to be original cost isn't any such thing, but it is what they claim to be original cost; that is, they want to put in the rate base the pipe lines that were constructed prior to World War No. 1, at the low costs that were prevailing at that time.

Now I propose to have Mr. Brown testify as to what the rate of return that a company such as the Hope Com-

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pany fairly was entitled to receive under all conditions prevailing at that time, and had a right to expect to receive on that property at the time it was constructed.

In other words, if we are going to go back to the original cost of this property, and the dollars that the Hope Company put in plant back in pre-World War periods, if that is to be given any consideration there must also be given consideration to the rate of return that the builders of that property had a right to expect when they put those dollars in property and thus permanently devoted them to public service.

To be more specific, if the rate of return in the development stage of this property, in its early history, under

all the conditions that prevailed at that time, the owners of property of this kind, engaged in that kind of a new enterprise, were entitled to a return of 20 percent upon it, at that time; and you are now going to take, you are now not going to reflect any increased value which we know has occurred in that property, then the proper rate of return to a company, that is the rate of return that they reasonably had a right to expect at the time they invested their dollars.

In other words, it is the rate of return that must accompany any notions as to original cost, as a rate base, and I am putting it in and I am offering Mr. Brown's testimony upon that point for that purpose, and I submit that it is entirely relevant and entirely proper testimony, and

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it is testimony that necessarily must accompany this notion that they have that the original cost can be used as a rate base.

Trial Examiner: Have you qualified this witness to testify with respect to that?

Mr. Cockley: Well, I think so. This witness, as I recall his qualifications, has testified that he has been in this business since 1908 or 1909. He has devoted his whole life to it.

Trial Examiner: That being the case, he is qualified to testify as to what rate of return this company was entitled to receive.

Mr. Cockley: He is qualified to express an opinion as to the rate of return that investors in a natural gas property such as this was, under all the conditions prevailing at various times over the past, the rate of return that they fairly were entitled to receive on money invested in plant account at those various times.

Mr. Springer: Do you mean that he has made a study for each of the 40 years in the past, of the prevailing current rate of return for each of those years?

Mr. Cockley: Well, he has grouped it by periods, as he has just stated.

Mr. Springer: And in 1909 he was a bookkeeper in the Boston office of Hornblower & Weeks?

Mr. Cockley: Well, if there is any question about

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qualification, I shall ask him additional questions.

Mr. Slaff: The objection goes much deeper than that, Mr. Examiner, before we get to the problem of qualification of this witness. I think the objection goes to the heart of this testimony, its relevancy and its materiality in this case. The relevancy of any testimony as to what an investor expected by way of return in 1898 or 1900 or 1915, or any other date, the relevancy of such testimony on the problem of fixing rate of return in the year 1941 for that time, and the reasonably immediate future, and it is to that that the objection is in the first instance directed.

Mr. Springer: And furthermore, it is history now, what rate of return Hope Natural Gas Company realized.

Mr. Cockley: So is original cost history.

Trial Examiner: Yes, the studies that the Commission's staff submitted aren't confined to the present.

Mr. Springer: It is reasonable return because the rate of return determination is controlled by current economic conditions.

Trial Examiner: Well, it occurs to me that the question might arise as to the reasonableness of the return received by the Company over the period of its history in connection with some of the problems here.

Mr. Slaff: Well, I don't understand that that is the purpose for which this testimony is offered, Mr. Examiner.

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Mr. Cockley: No, that isn't the purpose for which it is offered.

Let me put it this way: As I conceive original cost, if we are going to original cost in any respect as a rate base,

then we have got to, at the same time, take its Siamese twin along with it, and that Siamese twin is the rate of return that the owners of property reasonably had a right to expect when they built or purchased the property at the original cost, if you are going to take it as a rate base. In other words, this isn't offered as a part of my case at all. This is offered in answer to the claim that these rates that we have are too high because on an operating experience we made so many dollars over a certain period of time, and that is claimed on the other side as being too much.

I am going to show that if you take original cost as a rate base, and accompany it with this Siamese twin, namely, the rate of return that the owners of the property reasonably had a right to expect when they invested their dollars in this original cost, in this plant at the original cost, you will find that the amount of money that they are earning is not too much, because that rate of return will be substantially higher than the rate of return fixed on today.

In other words, in a word my claim is this, and I leave it with that,—if you are going to take an up-to-date, present value of the property, that pays very substantial attention

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to reproduction cost and present day cost, then the right rate of return for it is the present, up-to-date rate of return reflecting modern money conditions, and under the tests that have been laid down by the Court.

If you are going back to a rate base that is an accumulated history over a long period of years, then the right rate of return to go with that is the historical rate of return that should accompany original cost, and you can't both deprive the owners of this property of the increased value of the property and at the same time deprive them of the rate of return that they reasonably had a right to expect at the time they invested their dollars in that property.

Mr. Springer: I can't follow Mr. Cockley. There could be no deprivation of property here on the present de-

termination of rate base and what a fair rate of return is. Past profits in this case, which were great—there don't have to be any past losses. Neither can be a dominant factor in the determination of rates for the future. That is pretty well established.

Mr. Cockley: I have said nothing about either profits or losses, and the Company had both.

Mr. Reeder: Mr. Examiner, may I ask that counsel for the Company state whether he proposes to show the actual cost of the money invested at the time the investment was made, or whether he intends to offer, through this wit-

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ness, some speculation as to what the cost of money should have been?

Mr. Cockley: Well, that is an interesting question, but I don't understand it.

Trial Examiner: Well, there is a very serious question in my mind as to the relevance of the evidence. I appreciate the right of the respondent to make up his record here for the purpose of arguing the questions. I think more serious harm could be done by its exclusion than by its inclusion. The objection is overruled.

Mr. Cockley: Read the last question and answer, please?

(The record was read by the reporter as follows:

"Q. Now will you state whether you have determined what you consider an appropriate rate of return for money invested by Hope in its plant for each year since the beginning, or have made some division of the entire period? A. Well, my investigation led me to make four divisions. It seems that the history of the Hope Company falls into four natural divisions—").

By Mr. Cockley:

Q. Before you pursue that further, Mr. Brown, let me ask you one or two more questions that go to the matter of your qualifications.

As I recall it, your testimony was that you entered the brokerage business in about 1909, was it, or 1908? A. January, 1909.

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Q. And your first position was with Hornblower & Weeks, was it? A. Yes.

Q. The firm of which you are now a partner? A. Yes.

Q. And that was in the Boston office, as I recall it? A. Yes.

Q. When were you made chief statistician? A. I was assistant statistician from the middle of 1910 until the fall of 1916, when I was made chief statistician.

Q. Now will you tell us what the duties of a statistician are, or what your duties as statistician and as assistant statistician were, just generally? A. Well, the analyzing and reporting to the firm and to individuals on hundreds of corporations, railroads, public utilities and industrials.

Collaterally I gave lectures to college bodies on current financial conditions. That wasn't exactly a part of my duties, but they covered the whole range of securities held by the public, advising individuals and the firm.

As chief statistician I was the chief investigator for a number of years of corporations looking for financing by our firm.

Q. State the fact as to whether or not your duties, both as statistician and assistant statistician, required you

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to keep yourself informed, currently at least, as to the conditions of the money market, the financial conditions generally, and other factors that enter into a consideration of rate of return? A. They did, and I might add that down through the years I made a considerable study of past conditions, going back to perhaps 1890.

Q. And when was that done? A. When I was chief statistician.

Q. What did you study during the period from 1890, at that time? A. General financial conditions of the country.

Q. Markets? A. Markets for all kinds of securities.

Q. Prevailing prices at various times? A. General prices, not specific prices particularly, as many of the stocks that we have today date only back to 1899 and later years.

Q. Do you consider yourself fairly well informed and familiar with the period from 1898 down to date as to general financial conditions, prices of securities, and other factors that would enter into a determination of a rate of return?

Mr. Slaff: That is an objectionable question, Mr. Examiner. The facts must speak as to whether the witness is qualified, and not whether the witness himself considers

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himself qualified. That is thoroughly irrelevant.

Mr. Cockley: I beg your pardon, but it is a perfectly usual question to put to an expert witness, whether he himself feels that he is qualified to express an opinion upon the subject on which he is asked to express an opinion. I have heard it asked many, many times in all kinds of courts.

Trial Examiner: If he didn't think so, he wouldn't be here.

Mr. Cockley: Well, that is probably so, but the question has been raised whether he can go back to this period.

The Witness: Perhaps I can answer that by a simple statement, that I have trained many bond salesmen and have lectured to them on the year-by-year changes in current conditions from the early 90's on. I don't know whether that qualifies me or not.

By Mr. Cockley:

Q. Now, Mr. Brown, you said you found that this rate of return investigation fell naturally into four periods.

Will you tell us what the first period is, and why you have selected that as a period? A. The first period seems to be from 1898, when the Company was formed, down to and including 1907.

During that period a very substantial part, the bulk of the sales of gas were known as field sales to gas and oil companies in West Virginia during that boom period in

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West Virginia.

By 1908, this proportion had dropped until about three-quarters of the gas sales were to commercial and domestic consumers.

Secondly, in May 1908, the Company issued a block of stock to refinance, in permanent form, the advances made by the parent company.

Thirdly, in May 1908, the Company paid its first cash dividend.

So that the period from 1898 to 1907 represents what I might call the early development period of the Company's history.

Q. And what, in your opinion, was the fair rate of return that the owners had a right to expect on money invested in plant account during this early development period?

Mr. Reeder: I object, and may the record show an objection to this question upon the ground that it calls for a conclusion which is proper only for the Federal Power Commission and not for this witness. It calls for no fact and no matter which this witness is especially qualified to testify upon as an expert.

It may well be that if counsel intended to show the actual cost of money to this Company at the time the investment was made, that would be a proper analogue to the original cost, but as I understand it, what he is now

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calling for is to have a series of rate cases over 40 years

and have this witness express a conclusion for the Commission only upon each one of those four or five periods into which he has divided that vast period of time.

I submit that that kind of inquiry is entirely and wholly irrelevant, immaterial and incompetent.

Trial Examiner: That was my thought exactly with respect to the qualifications of this witness to answer such a question as that. It doesn't seem to me that he is qualified as an expert for the purpose of determining what a reasonable rate of return might have been to that Company back in that period.

Now if you want to show what the cost of money was during that period, that is a different thing.

Mr. Cockley: Well, Mr. Examiner, it seems to me that perhaps we are confused by words a little bit. Can there be any doubt that a man of Mr. Brown's broad business experience and investment experience is perfectly qualified to say, during a development period of a new enterprise, as this was, as to the earnings that would have been demanded by investors to put money into that enterprise? That is the question I have asked him.

Trial Examiner: If you want to ask him that question, go ahead.

Mr. Cockley: Well, that is the question that I under-

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stood I did ask him. Perhaps I used "fair rate of return" in place of it. Let me rephrase the question.

By Mr. Cockley:

Q. In your opinion, what prospective earnings on their money would investors in that period have demanded in order to put money into the plant of such a property as the Hope Company?

Mr. Reeder: I want to object to that question upon the ground that it is an incomplete question and wholly unintelligible, standing alone. If counsel wants to go into

the question of what return the investor would demand upon his money for some specific period of time, which came down to and included the present, that might be material, but if he is going into the question of what return the investor demanded in 1902, that, I submit, is entirely irrelevant and immaterial to this inquiry.

Why should this Commission go into an historical study of that kind and into evidence that might have been relevant to a rate case in 1902?

Now I am objecting to this question as it stands, as irrelevant and immaterial to this inquiry.

Trial Examiner: Well, I think we have gotten right back to the original question.

Mr. Reeder: No, Your Honor, I am objecting now upon the ground that this question doesn't include any period of time. He says, "What rate of return would they demand"—

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Trial Examiner: (Interposing) In the period beginning 1898 to 1907, as I understand, or 1908.

Mr. Cockley: That is right.

Mr. Reeder: Does he mean for their investment for that period only, or for their investment from that period down to 1941, because that is the period of time that we are interested in.

Trial Examiner: I realize that, of course, and as I said before, there is a very serious question in my mind as to the relevancy of this evidence, but I have already in effect ruled on that.

The objection is overruled.

Mr. Slaff: It is understood, Mr. Examiner, that our objection extends to this entire line of inquiry, so that we need not repeat it specifically?

Trial Examiner: Yes, that will be understood.

Mr. Reeder: And may we have an exception?

Trial Examiner: You may have an exception.

Mr. Reeder: And may it be understood that our objection and exception runs to all this line of inquiry?

Trial Examiner: That will be understood, yes.

Proceed.

The Witness: May I have the question read, please?

(The question was read by the reporter.)

The Witness: Not less than 15 to 20 percent.

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By Mr. Cockley:

Q. Will you state the factors that you took into consideration in arriving at that opinion? A. In the first place, this was a relatively new industry, it was a brand new enterprise in a young industry. There was substantially no growth in the natural gas industry until the late 80's, and the 90's showed a recession, largely due to the depression.

The history of the industry through the 80's and the 90's showed exploitation of local fields very largely, which were promoted by, in a few cases, municipalities, or a few public spirited citizens, or an occasional pioneer operator.

Those fields, in most instances, gave out. The only fields that continued were in Western Pennsylvania and in West Virginia, and a portion of Indiana.

As recently as December, 1903, the Ohio State geologists wrote an annual report which was very discouraging on the future of the natural gas industry.

Secondly, there had to be new markets developed. As I stated before, the first few years showed sales very largely in the field.

Thirdly, with the local fields only being exploited, a high rate of return was necessary to attract capital.

Fourthly, there was practically no transmission of gas beyond the local fields. The transmission of gas was in its

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infancy, at least.

Fifthly, the Standard Oil Company, in its history, showed a net return on its net assets of about 25 percent during that period, and I can't conceive of a Board of Directors investing in a new mining enterprise for less than 15 to 20 percent, when it was already showing a 25 percent return on its own assets.

Q. Now what is your next period, Mr. Brown, that you have taken, and why have you taken that period? Give us the reasons why you have taken that as the second period? A. The second period I call from 1908 to 1926, both inclusive.

The Hope Company had passed from its early development stage to what might be called a certain stage of maturity and permanency. There were several issues of bonds put out during this period, notably in 1917, the Southern California Gas Company, and many issues since. I quote that company because for many years it has been regarded as the highest grade natural gas company in the United States, and the only company which has ever issued a Aaa Moody rating bond.

Secondly, I end the period in 1926 because at about that time, through improved electric welding and other processes, there were long distance pipe lines from the western and southwestern fields to the large markets, St. Louis, Chicago, Minneapolis, Detroit, and so forth.

Q. And on what terms could new capital be attracted,

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in your opinion, to invest in a natural gas business such as Hope's, during that period? A. In my judgment, you could not attract capital into an enterprise like Hope, which remained essentially a mining enterprise, very much on all-fours with a mining company of the better grade like Anaconda and Kennecott and Phelps-Dodge, or like the oil-producing companies—for less than 12 percent during that period, and some more than 12 percent in certain of those years.

Q. Now will you state the considerations that lead you to that opinion? A. During a large part of that period the average return or the average earnings price ratio of mining and smelting companies was 13 percent, and the average earnings price ratio of oil-producing and refining companies was 14 percent. The period started out with a panic and a depression in 1907-1908; good business in 1909; then a period from 1910 to 1913 which was below normal, with the exception of a few months in 1912. 1914 was a very bad year, with business at a low ebb; it was impossible to float any securities of any kind except the very highest grade. The Stock Exchange was shut down for 4 or 5 months in the latter part of the year.

Then came the World War boom, which started in the spring of 1915, and virtually continued to the middle of 1920, but it was essentially a common stock period, although

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there were a few bonds issued, but practically no preferred stocks, and the earnings price ratio on those common stocks was quite high.

Then came the so-called inventory panic of the fall of 1920, with the depression lasting through 1921, with great difficulty in financing anything.

In 1921, the Southern California Gas Company put out two issues at better than a 7 percent yield basis, but only bonds of high grade could have been floated in 1921.

Mr. Knapp's Chart No. 1 in Exhibit 82-A, shows Moody Aaa bonds above 6 percent as compared with less than 3 percent today, and Moody's Baa bonds, yielding above 8 percent, as compared with approximately 4½ percent today.

Then the period 1922 to 1926 was more normal, with a slight variation in 1923 and 1924, and good business in 1925 and 1926; but the rate of return was much higher during that period than it is today.

Q. During which period? A. From 1922 to 1926; in fact, during the whole period from 1908 to 1926.

Thirdly, the leading handbook on bonds, as recently as 1927, cautioned the investor with respect to bonds of natural gas properties, due to the prospective exhaustion of their supply.

So I rank the reasonable over-all return which an in-

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vestor would expect during the whole period, averaging it together, as not less than 12 percent, and in some of those years higher than that.

Q. Mr. Brown, will you state the fact as to whether or not the financing of natural gas companies during that period was a matter of private investment or accomplished through the public flotation of securities? A. There was occasionally a bond issue of relatively small amount sold in local markets, but not in national markets, dating back to 1900, on natural gas properties. I don't know of any preferred or common stock on a natural gas company that was floated by underwriters to the public until the end of this period.

There was a market for several issues which had been put out to the stockholders through early mergers—the National Fuel Gas, for instance. The earliest market I can find on Southern California Gas was 1923.

Q. Now are you talking about preferred or common? A. Preferred. The common was all owned by Pacific Lighting, which in turn had a common stock that was outstanding, but it also included electric properties.

So that my answer to your question would be that in this period, Hope might have been able to float an issue of bonds during several of these years, but could not have floated any bonds during other years in this period. It

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might have put out a common stock during a portion of that period, particularly in 1916, 1917, 1918 and 1919. It could

not have floated any common stock in 1920 or 1921. It might have been able to in 1922; it is very doubtful if it could in 1923 or 1924. It might have floated some common stock in 1925 and 1926. I doubt if it could have floated any preferred stock during any of those years.

Q. You have referred several times to the fact that it could put out an issue of bonds or could have sold some common stock. I ask you if there was any time during that period that it could have substantially recapitalized the corporation with new capital by the flotation of various classes of securities, such as is common today? A. No, sir, it could not. That is one reason why I ended the period at 1926, and when I come to my third period I will explain that.

Q. Now is there anything further you want to say concerning this period from 1908, your second period, to 1926? A. No, sir.

Mr. Slaff: Before you leave that, will you be good enough to state the name of the leading handbook to which you referred as cautioning investors about natural gas securities because of the possible exhaustion of the fields?

The Witness: The Principles of Bond Investment, by Lawrence Chamberlain, 1927 edition.

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By Mr. Cockley:

Q. Mr. Brown, will you tell us what your third period is, and why you have selected that? A. My third period is 1927 to 1934, both inclusive.

This period witnessed a widespread extension of market areas due to the long distance pipe lines. That aroused the interest of the investment banker and the investing public.

Prior to this period, there had been only occasional issues of bonds on natural gas properties. After the period started there were many issues of securities, with increased interest on the part of the public, and an in-

creased or rising quality rating of natural gas properties in the minds of the public.

The period includes the boom years of 1927, 1928 and 1929; the deep depression following the panic in the fall of 1929, and only a partial recovery in 1934. The reason I stopped at 1934 was because that was substantially the end of the normal money market, or the market for normal money rates.

Q. Well, in your opinion, on what terms could the capital requirements of the Hope Company during this period have been financed? A. The Hope Company still remained essentially a mining enterprise, and in my judgment could not have raised capital on an over-all basis of less than 10 to 11 percent, and it could not have refinanced itself in total during some of those years.

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Q. And will you tell us any other considerations that lead you to this opinion, other than you have mentioned? A. While the years 1927, 1928 and 1929 were boom years, and it was essentially an era of common stocks, it might have been possible to have issued some bonds on the Hope property. At no time during the period would it have been as sound to have put out bonds as it would to have had an all common stock capital structure, and at no time during the period could it have sold stock for less than an 8 percent yield to the public, with a 2 percent addition, carried to surplus, and much of the time it couldn't have sold common stock at any price.

Q. Well, is it your testimony that the most favorable terms it could have obtained during that period were the basis you have just described? A. It is.

Q. What is the fact during the few years when you say it might have sold a small issue of bonds—and, I suppose, or a small issue of preferred stock— A. (Interposing) That is correct.

Q. Was there any time during that period that it could have sold both with economy? A. No, there was no time during the period, in my judgment, where it could have put out three classes of securities.

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Q. And would there have been any economy in the cost of money to the Company for refinancing its needs, of putting out a small issue of bonds or preferred stock, with the balance common? A. Of course, bond money costs less than stock money, but in my judgment the saving by putting out a relatively modest amount of bonds would be more than offset by the higher cost of the common stock which necessarily carries a higher yield when it has senior securities ahead of it. So I see no net saving by financing during this period with bonds and common stock.

Q. Am I correct that your testimony, then, is that during this period this was a straight common stock risk? A. In my judgment, yes.

Q. Now what is your final period, and why have you selected that? A. My final period is from 1935 to date. The chief characteristic of this period has been the constantly declining money rates. That is very clearly shown in Mr. Knapp's exhibit. At the same time, there is a second factor there which I brought out a year ago in my direct testimony. There has been an improvement in the rating of senior securities of natural gas bonds during the past 3 or 3½ years.

Before this period, nearly all natural gas bonds ranked below, in rating, those of artificial gas bonds. The spread

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between those issues has now narrowed, and the first mortgage bonds of the higher grade natural gas companies now have a high investment rating. There are several issues carrying Moody's rating of Aa.

Q. And on what terms, during this period, is it your opinion that the financial requirements of the Hope Com-

pany could be met? A. In my testimony a year ago, I said not less than 8 percent, and I still stand by that.

Q. For the whole period? A. For the whole period.

Q. And are the reasons— A. (Interposing) The reasons are set forth in my prior testimony.

Now since January 1941, there has been a dip and a partial recovery in the price of bonds. There has been an improvement in the price of preferred stocks. There has been a very substantial dip in the price of common stocks of all utilities. So that the net cost of financing a utility today by bonds, preferred and common stock, in my judgment is slightly higher than it was on January 1. It certainly is not any lower, because the higher yields on common stocks today more than offset the improvement in preferred stock prices, with resultant lower yields, and the substantially no change in bond yields.

Q. How does the earnings price ratio of common stocks



today compare with what it was, say, a year ago, or when you testified in June of 1940? A. The earnings price ratio of utility common stocks today is higher than it was a year ago.

Q. That is, you mean the price is lower? A. The price is lower and the yield is higher.

Q. The yield is higher? A. Yes.

Q. Than it was at the time you testified in the summer of 1940? A. That is correct.

## 20. COMPANY WITNESS RHODES' EXHIBIT NO. 24 ENTITLED: "Necessary Annual Rates for Depreciation—Written Statement of George I. Rhodes"

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## WRITTEN STATEMENT OF GEORGE I. RHODES

### 1. Scope Of This Exhibit

This exhibit sets forth and explains an engineering determination of the necessary annual allowances or rates for depreciation required to reimburse Hope Natural Gas Company for the annual depreciation suffered by its:

A. Production system structures
B. Production system pipe lines and appurtenances
C. Transmission system structures
D. Transmission system pipe lines and appurtenances
E. Compressor station equipment
F. General structures
G. Office furniture and equipment
H. Warehouse, shop and laboratory equipment
I. Telephone and telegraph system

This determination is based on the actual depreciation experience of the Company from the beginning of business through 1938.

The property has been classified as above shown to meet the limitations of the Company's records of early depreciation experience. The appurtenances to pipe lines referred to above include rights of way and measuring and regulating equipment.

Allowances for drilling and cleaning equipment and for automobiles and trucks have not been determined in this exhibit because the depreciation on such equipment is now reflected in operating expenses through clearing accounts or their equivalent. Allowances for depreciation of wells, leaseholds and natural gas rights have not been determined in this exhibit, the necessary annual allowances for depletion of these properties being set forth in a separate Company exhibit containing the rate statement.

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## 2. Total Depreciation Suffered By The Company's Properties—Unrealized and Realized

Depreciation inevitably begins to take place when construction of a new natural gas property is complete. Corrosion begins in its pipe lines. Other kinds of property begin to wear out or deteriorate in various ways. For a considerable time the resulting depreciation causes no replacements of any kind. It accumulates or accrues in the property. It can be determined only by an inspection and study of the property. This accrued or accumulated depreciation is later herein referred to as "unrealized depreciation" since it has not as yet caused retirement losses.

As a natural gas property becomes older some of its parts such as short sections of pipe lines located in the most corrosive soils depreciate to such an extent that they must be renewed or replaced. Equipment is moved from place for various causes in the upkeep of the property. Whatever may be the cause of replacements or movements from place to place, the Company incurs a loss which is realized through the retirement of property. Generally the loss is the difference between the cost of the property retired and its salvage value. This loss is referred to as "realized depreciation."

If a natural gas property is inspected and studied before any property whatever has been retired or renewed the unrealized depreciation disclosed by inspection is the total depreciation suffered by the Company. After retirements have been made, however, an inspection and study disclose only that part of the total depreciation suffered which has not been eliminated by renewals.

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The total depreciation suffered by the Company's properties is thus the amount of the unrealized depreciation found by inspection and study to have accumulated in

the property, plus the amount of realized depreciation previously experienced as ascertained from the Company's records.

### 3. Basic Method Used In This Exhibit

The basic method used in this exhibit is to determine first the total amount of depreciation that has occurred in the Company's properties from the beginning to December 31, 1938, both unrealized and realized. If this total were divided by the total years the property was in service it would give the average annual amount of depreciation. Dividing this average annual amount by the average annual cost of the property exposed to depreciation would give the average annual rate as a percentage. This percentage, had it been applied to the undepreciated cost of the property from the beginning of its history to December 31, 1938, would have provided sufficient money to provide for all retirement losses experienced and would leave in the depreciation reserve on December 31, 1938 a sum equivalent to the accrued depreciation found to exist on that date.

Mathematically, of course, precisely the same percentage will be found by taking the total amount of depreciation, both unrealized and realized, for the entire period and dividing this by the sum of the costs of the property exposed to depreciation at the beginning of each of the years of exposure. This sum is sometimes referred to by accountants and others and later herein as the "dollar-years exposure to depreciation." This simpler computation is used in this exhibit.

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This basic method coordinates the Company's experience in the past both as to losses realized on the retirement of the property up to December 31, 1938, and the unrealized depreciation accumulated in the property as of that date, as set forth in a separate Company exhibit. It

produces a complete correlation of annual and accrued depreciation.

While the basic method is easily understood, the application of it for various reasons needs some further explanation. Accrued or unrealized depreciation existing on December 31, 1938, has been determined and set forth in a separate Company exhibit in terms of reproduction cost. The realized depreciation on the other hand has of necessity been determined on the basis of the Company's book retirement losses. Likewise the only available measure of the cost of the property at the beginning of each year from 1898 through 1938 is the cost heretofore capitalized on the Company's books, called "book cost" in this exhibit. In order, therefore, that the true percentage of depreciation may be determined these book costs have been converted into terms of reproduction cost.

In view of the Company's practices in recording current depreciation and particularly the requirements of the new system of accounts it is necessary to make certain adjustments to the book figures appearing in the Company's records which are explained in subsequent paragraphs.

### 4. Adjustments of the Company's Book Figures Related to Depreciation

The Company's past depreciation records were analyzed in detail from the commencement of business in 1898 to the end of 1938, including original vouchers and



entries relating to retirements and retirement losses. Care was exercised to eliminate the effect of transfers from one account to another, to eliminate charges resulting from restoration of materials to the warehouse at less than book cost, and to eliminate errors in the charges. The results of this detailed analysis are summarized on Tables G to N at pages 25 to 32 of this exhibit. These tables show

for each year for the several classes of property as grouped in this study the Company's retirements and retirement losses per books. They also show the cost of these properties as heretofore capitalized on the Company's books at January 1 of each year. These book figures constitute the basic data on which realized depreciation has been determined and adjusted in this exhibit.

The Company's past book depreciation figures differ from current requirements or otherwise require adjustment in four particulars:

(a) There have been some items of property retired from service whose retirement on the books has been deferred. These are called "deferred retirements" in this exhibit.

(b) A full determination of depreciation experience requires consideration of the depreciation on purchased property before the date of purchase.

(c) In pipe line accounts labor has usually been retired and charged as depreciation only in the case of lines lifted and not replaced. Present practice requires charging to depreciation the labor of installing all materials retired.

(d) For many years the cost of abandoning property has been charged to operating expense. Present practice requires charging to depreciation the cost of abandoning all property retired.

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The basic methods of adjusting the book figures for these matters and correlating them with the accrued depreciation found to exist in the property at the end of 1938 are described in the succeeding subsections.

*(a). Adjustments for deferred retirements*

* * * * *

—8—

*(b). Adjustments for purchased property*

* * * * *

—9—

*(c). Adjustment to reflect full retirement of labor costs*

* * * * *

—11—

*(d). Adjustment for cost of abandoning property*

* * * * *

**5. The Company's Book Depreciation Figures Expressed In Terms of Reproduction Cost**

As heretofore noted, the figures as to the Company's past depreciation experience must be expressed in terms of the reproduction cost before they can be correlated with the accrued depreciation found to exist in the property at December 31, 1938. This is accomplished by the simple

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operation of multiplying the appropriate depreciation figures in terms of book cost by the ratio of the reproduction cost of the property as of December 31, 1938 to the book cost of the property at that date. These adjusting factors are determined on Table F on page 24.

**6. Determination of the Company's Retirements and Realized Depreciation**

The data as to the Company's total book retirements and the adjustments to these book figures are shown by Table C at page 21.

* * * * *

The amount of realized depreciation (retirements less salvage) suffered by the Company over the years has been determined from its records and from the adjusted retirements shown in Table C. This determination is shown by Table B on page 20.

* * * * *

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**7. Determination of Unrealized Depreciation**

The unrealized depreciation existing in the Company's properties at December 31, 1938 in terms of reproduction cost is stated for the various classes of property on Table D. In this table column (1) lists the several classes of property. Column (2) shows the reproduction cost at December 31, 1938 as taken from the Company's reproduction cost exhibit. Column (5) shows the accrued or unrealized depreciation existing in the several classes of property at December 31, 1938 as found by inspection, observation and study of the properties as set forth in a separate Company exhibit. Column (4) expresses this existing accrued or unrealized depreciation in percentages of the cost new.

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**8. Determination of Dollar-Years Exposure to Depreciation**

The determination of the dollar-years exposure to depreciation for the several classes of the Company's property is shown by Table E.

* * * * *

**9. Determination of Necessary Annual Depreciation Rates**

All of the elements entering into a determination of the necessary annual allowances or rates for depreciation

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are described above together with the adjustments applied to book figures to make them applicable to the methods currently required to be followed in handling depreciation. The determinations of the necessary annual allowances for depreciation are all made on Table A.

Column (1) shows the class of property for which the annual allowances or rates of depreciation are determined. As explained above, these classes of property were defined by the limitations of the early retirement records.

Column (2) shows the total realized depreciation suffered by the property taken from column (8) of Table B.

Column (3) shows the amount of unrealized depreciation accumulated in the property taken from column (5) of Table D.

Column (4) shows the total depreciation suffered by the Company to December 31, 1938. It is the sum of the realized depreciation, column (2), and the unrealized depreciation, column (3), for each class of property.

Column (5) shows the dollar-years exposure of the property to depreciation taken from column (9) of Table E.

Column (6) shows the final determination of the necessary annual allowances or rates for depreciation expressed as a percentage applicable to cost new. It is the result obtained by dividing the total dollar amount of all depreciation suffered to December 31, 1938 shown by column (4) by the total dollar-years exposure to depreciation up to that date as shown by column (5).

Column (7) shows the corresponding rates applicable to the depreciated cost of the property determined by dividing the rates in column (6) by the per cent condition of the property as shown in column (3) of Table D.

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The annual rate of depreciation of telephone and telegraph system property could not be determined by the above method because the Company has recorded no realized depreciation of this kind of property. A study of pole replacements and the condition of the property as inspected indicates that 4.0 per cent per year is a fair allowance for depreciation applicable to reproduction cost new and 5.9 per cent per year applicable to reproduction cost new less depreciation.

In summary of Table A the necessary annual allowances or rates of depreciation applicable to costs new and less depreciation of the several classes of the Company's property are as follows:

| Class of Property | Annual Rate of Depreciation Applicable To Reproduction Cost | |
|---|---|---|
| | New | Depreciated |
| A. Production system structures | 4.52% | 8.04% |
| B. Production system pipe lines and appurtenances | 2.04 | 2.71 |
| C. Transmission system structures | 2.64 | 3.67 |
| D. Transmission system pipe lines and appurtenances | 1.28 | 1.61 |
| E. Compressor station equipment | 1.76 | 2.17 |
| F. General structures | 2.59 | 3.55 |
| G. Office furniture and equipment | 3.41 | 4.87 |
| H. Warehouse, shop and laboratory equipment | 3.29 | 4.37 |
| I. Telephone and telegraph system | 4.00 | 5.88 |
| Average | 1.80% | 2.32% |

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These annual rates of depreciation as heretofore stated are determined from the Company's actual depreciation experience over the entire history of its properties and correlate annual depreciation with the accrued depreciation deducted in the Company's exhibits from reproduction cost new. They constitute minimum necessary rates in that they provide for no contingencies except such as have occurred in the past.

Signed at Clarksburg, West Virginia, this May 20, 1940.

George L. Rhodes.

Table A

## HOPE NATURAL GAS COMPANY

### Determination of Necessary Annual Depreciation Rates

### Based on Realized Depreciation Up To December 31, 1938, Unrealized Depreciation Accrued at December 31, 1938 and Dollar-Years Property Has Been Exposed to Depreciation

| Classes of Property | Realized Depreciation to December 31, 1938 (From Table B) | Unrealized Depreciation at December 31, 1938 (From Table D) | Total Depreciation Suffered to December 31, 1938 | Dollar-Years Exposure to Depreciation (From Table E) | Necessary Annual Depreciation Rates Applicable To Reproduction Cost | |
|---|---|---|---|---|---|---|
| | | | | | New | Depreciated |
| (1) | (2) | (3) | (4) = (2) + (3) | (5) | (6) = (4) ÷ (5) | (7) |
| **Production System Property** | | | | | | |
| (1) Structures | $ 190,016 | $ 217,115 | $ 407,131 | $ 8,997,669 | 4.52% | 8.04% |
| (2) Pipe Lines and Appurtenances | 4,938,471 | 5,082,534 | 10,021,005 | 491,976,896 | 2.04 | 2.71 |
| **Transmission System Property** | | | | | | |
| (3) Structures | 578,841 | 622,148 | 1,200,989 | 45,468,543 | 2.64 | 3.67 |
| (4) Pipe Lines and Appurtenances | 1,480,634 | 3,873,141 | 5,353,775 | 416,739,397 | 1.28 | 1.61 |
| (5) Compressor Station Equipment | 1,534,547 | 2,092,052 | 3,626,599 | 205,717,473 | 1.76 | 2.17 |
| **General Property** | | | | | | |
| (6) Structures | 6,686 | 89,510 | 96,196 | 3,709,176 | 2.59 | 3.55 |
| (7) Office Furniture and Equipment | 83,877 | 70,267 | 154,144 | 4,520,997 | 3.41 | 4.87 |
| (8) Warehouse, Shop and Laboratory Equipment | 106,239 | 100,270 | 206,509 | 6,281,999 | 3.29 | 4.37 |
| (9) Telephone and Telegraph System | — | — | — | — | 4.00 | 5.88 |
| Average Annual Rate | | | | | 1.80% | 2.32% |

**21. COMPANY WITNESS SULLIVAN'S EXHIBIT NO. 126 ENTITLED: "Average Return from the Company's Export Business, 1937-1940, Based on the Company's Claims as to Rate Base as of December 31, 1938 and Operating Expenses"**

# HOPE NATURAL GAS COMPANY

## Average Return from the Company's Export Business, 1937-1940,

## Based on the Company's Claims as to Rate Base as of December 31, 1938 and Operating Expenses*

| Reproduction Cost New Less Depreciation of Production Plant, Transmission Plant and General Plant (Jointly Used) as of December 31, 1938 (A) | 1937 | 1938 | 1939 | Average of Years 1937-1939 | 1940 | Average of Years 1937-1940 |
|---|---|---|---|---|---|---|
| (1) **Rate Base** | $66,360,837 | $66,360,837 | $66,360,837 | $66,360,837 | $66,360,837 | $66,360,837 |
| **Revenues from Export Business** | | | | | | |
| Revenue from Gas Sales to: | | | | | | |
| (2) The East Ohio Gas Company | $12,757,070 | $11,157,537 | $12,359,500 | $12,091,569 | $14,726,736 | $12,750,361 |
| (3) The Peoples Natural Gas Company | 1,349,815 | 1,105,160 | 1,487,680 | 1,314,218 | 3,749,366 | 1,923,005 |
| (4) The River Gas Company | 115,725 | 77,915 | 83,174 | 92,272 | 136,063 | 103,219 |
| (5) Fayette County Gas Company | 267,531 | 263,966 | 264,725 | 265,407 | 270,618 | 266,710 |
| (6) The Manufacturers Light & Heat Company | 1,425,050 | 1,258,602 | 787,738 | 1,157,130 | 706,130 | 1,044,380 |
| (7) **Total Revenues from Export Business** | $15,915,791 | $13,863,180 | $14,982,817 | $14,920,596 | $19,588,913 | $16,087,675 |
| **Cost of Export Gas Exclusive of Return** | | | | | | |
| (8) Production Expenses Exclusive of Exploration and Development Costs | $ 2,146,382 | $ 2,190,148 | $ 1,906,524 | $ 2,081,018 | $ 2,010,170 | $ 2,063,306 |
| (9) Exploration and Development Costs | 518,581 | 633,272 | 508,832 | 553,562 | 407,920 | 517,151 |
| (10) Gas Purchased | 8,150,053 | 7,650,099 | 7,680,938 | 7,827,030 | 8,538,973 | 8,005,916 |
| (11) Transmission Expenses | 1,798,308 | 1,695,381 | 1,728,006 | 1,740,565 | 2,240,591 | 1,865,571 |
| (12) General Administrative Expenses | 1,064,224 | 1,063,471 | 1,034,758 | 1,054,151 | 1,014,206 | 1,044,165 |
| (13) Taxes at Rates in Effect Exclusive of Federal Income Taxes | 1,075,220 | 1,019,757 | 1,078,979 | 1,057,985 | 1,211,461 | 1,096,355 |
| (14) Other Expenses | 10,522 | 12,481 | — | 7,668 | — | 5,751 |
| (15) 10 Year Amortization of Property Reclassification Expense | 100,595 | 100,595 | 100,595 | 100,595 | 100,595 | 100,595 |
| (16) 10 Year Amortization of F. P. C. Rate Investigation Expense | 122,950 | 122,950 | 122,950 | 122,950 | 122,950 | 122,950 |
| (17) Depletion of Wells | 625,129 | 434,997 | 558,871 | 539,666 | 827,743 | 611,685 |
| (18) Depletion of Operated Leases | 26,624 | 18,569 | 23,826 | 23,006 | 35,257 | 26,069 |
| (19) Depreciation of Other Property | 984,850 | 984,850 | 984,850 | 984,850 | 984,850 | 984,850 |
| (20) Credit: Gas Used in Own Operations | (458,977) | (459,725) | (471,686) | (463,463) | (582,576) | (493,241) |
| (21) Credit: Other Revenue | (525,784) | (440,787) | (419,492) | (462,004) | (392,638) | (444,663) |
| (22) Credit: Revenue from Local Distribution of Gas in West Virginia Less Specific Distribution Costs | (2,690,096) | (2,002,247) | (2,312,984) | (2,335,109) | (2,695,796) | (2,425,281) |
| (23) Cost of Deep Test Well Chargeable to Non-Productive Well Drilling Expense for 1940 | — | — | — | — | 165,963 | 41,491 |
| (24) Federal Income Taxes on Basis of Tax Rates in Effect | 324,758 | 54,239 | 228,928 | — | 969,889 | — |
| (25) Federal Income Tax at Rate of 24 Per Cent Plus Probable 6 Per Cent Surtax | — | — | — | 301,044 | — | 307,580 |
| (26) Increases in Payrolls during Years 1940 and 1941 Not Reflected in Operating Expenses | — | — | — | 202,172 | — | 202,172 |
| (27) Increase in Unemployment Tax to Reflect Present 3 per Cent Tax Rate in 1937 | — | — | — | 9,324 | — | 6,902 |
| (28) Increase in West Virginia Property Tax Assessment in 1941 | — | — | — | 81,751 | — | 81,751 |
| (29) **Total Cost of Export Gas Exclusive of Return** | $13,273,339 | $13,078,100 | $12,753,905 | $13,426,761 | $14,959,558 | $13,920,265 |
| **Net Return from Export Business** | | | | | | |
| (30) **Amount** | $ 2,642,452 | $ 785,080 | $ 2,228,912 | $ 1,493,835 | $ 4,629,355 | $ 2,167,410 |
| (31) **Per Cent Return** | 3.98% | 1.18% | 3.36% | 2.25% | 6.98% | 3.27% |

Notes: ( ) Parentheses denote red figures.

* The Company's figures appearing on this statement do not reflect any increase in rate base due to capital additions or increase in valuation subsequent to December 31, 1938. Also the Company expenses for the individual years 1937, 1938, 1939 and 1940 do not include the increase in taxes or payrolls which will be incurred in the future as shown by the testimony presented at the hearings commencing July 7, 1941, these increased expenses being reflected only in the 3 year and 4 year average figures.

(A) Including the nominal acquisition cost of leaseholds, gas rights and royalties and working capital, but excluding property used to transport coke oven gas and going concern costs or value.

## 22. TESTIMONY OF COMPANY WITNESS EUGENE P. SULLIVAN AS TO EXHIBIT NO. 126 SHOWING AVERAGE RETURN FROM THE COMPANY'S EXPORT BUSINESS, WEDNESDAY, JULY 16, 1941, RECORD PAGES 6198-6208, 6210-6212, 6215-6216, 6218, 6227.

—6198—

Mr. Milde: May I have marked as Exhibit No. 126 a statement entitled "Average Return from the Company's Export Business, 1937-1940, Based on the Company's Claims as to Rate Base as of December 31, 1938 and Operating Expenses"?

Trial Examiner: It may be so marked.

(The statement referred to was marked as Exhibit No. 126 for identification.)

DIRECT EXAMINATION by Mr. Milde (Continued).

Q. Mr. Sullivan, I hand you Exhibit No. 126 for identification, entitled as I have just stated, and ask you if you prepared the statement contained in this exhibit? A. I did.

Mr. Milde: Mr. Examiner, before I interrogate Mr. Sullivan about this statement, I would like to say just one thing: Our view of the case is that the normal average experience of the company is fully reflected by the company's operating experience during the years 1937, 1938 and 1939, and we have not heretofore put in figures for 1940 for that reason.

However, the Commission's staff has included figures for 1940, and in order that our figures could be compared to theirs, we have in this exhibit also set out the 1940 results

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of operation as we see them, and the average of the years 1937-1940, as well as the average for the three years I previously mentioned.

I just wanted to make that statement to make it perfectly clear that we do not intend, by offering this exhibit and some of the other subsequent exhibits, which set out our figures for 1940, to deviate in any way from our claim, which we think will be supported by the evidence, that the normal average operating experience of the company, on the basis of which future rates should be set, is fully and adequately revealed by the operating conditions and results of the three-year period, 1937-1939, inclusive.

Trial Examiner: These figures shown under 1940, then, in this exhibit, are not the same as the figures shown by Commission counsel's exhibit?

Mr. Milde: No, these are our figures for 1940, and we put them in, in order that they could be compared with the Commission staff's exhibit.

By Mr. Milde:

Q. Mr. Sullivan, will you explain very briefly what the statement in Exhibit 126 shows? A. This statement shows the average return from the company's export business during the period 1937 to 1940, based on the company's claims as to rate base as of December 31, 1938, and operating expenses.

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In arriving at net return from the export business, the revenue from the local sale of gas in West Virginia less specific distribution costs has been credited to production, transmission and general expenses.

Q. Is that the same method that the company used in its original rate statement, Exhibit No. 37 and— A. (Interposing) Yes, the figures appearing under the column headed "Average of Years 1937-1939" correspond with those presented in Company Exhibit 37.

Q. Let me ask you also, Mr. Sullivan, whether that method of handling West Virginia revenues as a credit against the cost of export gas, was not also used by Mr.

Dunn of the Commission's staff in Exhibit No. 90? A. It was. Mr. Dunn did set forth the results on the basis of the Commission examiners' rate base and expenses, in Exhibit No. 90.

Q. And that method assumes that the full contribution of the West Virginia business by way of revenues over and above specific expenses, should be applied in reduction of the cost of export gas? A. It does.

Q. Will you proceed with the explanation? A. Referring to the column headed "Average of Years 1937-1939," which is the same as that appearing in Exhibit No. 37, except as to the items of amortization of property re-

—6201—

classification expense and FPC rate investigation expense—

Q. (Interposing) What are the numbers of those? A. Those are items Nos. 15 and 16.

Q. And what is the difference? A. In this exhibit these costs are based on amortizing the total cost of these items over a 10-year period, and providing 8 percent interest on the unamortized balance.

Q. Well, you use there the figures that you show in Exhibit No. 125? A. That is correct.

Q. And in the company's original rate statement, you used, or Mr. Rhodes used, the 5-year amortization period? A. The 5-year amortization period applied to a preliminary estimate of this expense of $1,250,000.

Q. For the two expenses? A. Yes.

Q. Will you proceed? A. On line 25 is set forth the Federal income taxes at the rate of 24 percent, plus probably 6 percent surtax. The figures in this exhibit are based on those tax rates, while in Exhibit 37 they were based on the 18 percent tax rate which was in effect at the time Exhibit 37 was prepared.

Q. Well, in line 24, don't you show for the individual years the income taxes at the rates actually in effect? A.

—6202—

Yes, the figures for the individual years appearing on this statement are based on the tax rates and labor rates in effect, and in the three and four year average columns are included the taxes on the basis of the present tax rates, and the operating expenses have been adjusted to include the increase in pay rolls not reflected in these years' operating expenses.

Q. That was shown in one of Mr. Chisler's exhibits? A. Yes, that was taken from Exhibit No. 107 as to the increase in pay rolls, and Exhibit No. 109 for the increase in West Virginia tax in 1941 due to the increase in West Virginia assessment.

Trial Examiner: What exhibit was that last one?

The Witness: 109.

By Mr. Milde:

Q. Well, then, let me ask you if this isn't the substance of how these statements are set up.

For the individual years you show the operating results under the pay roll and tax rates that were actually in effect? A. That is correct.

Q. But when you average that expense to get some idea as to the future, you include present Federal income tax rates and the present West Virginia property tax payment, or the additional tax payment, and the present pay roll, rather than the pay roll in the past; is that the substance of what this is? A. That is correct.

—6203—

There are also some minor adjustments in the figures appearing in Exhibit No. 37.

—6204—

Q. Now, you have explained generally that your 1937, 1938, 1939 figures are the same as Exhibit 37, subject to these changes you have mentioned? A. That is correct.

Q. What are these 1940 figures? A. The 1940 figures were determined from the company's books, and all adjustments were made to conform with the adjusted expenses as previously presented in Exhibit 37.

Also, for the year 1940, the expenses have been adjusted to include the cost of the deep-test well chargeable to non-productive well drilling expense for 1940, as shown in the exhibit presented by Mr. Chisler, Exhibit 110.

Q. And except for any modifications you have made in your testimony just now, these 1940 figures are set up in the same general form as the company's figures for 1937 to 1939? A. They are.

On the last line of this statement, line 31, is shown the average return earned during the average of the years 1937 to 1939, on the reproduction cost new less depreciation of the company's production, transmission and general properties, in the amount of 2.25 percent.

Q. And what do you show for the year 1940? A. The year 1940 by itself shows a return of 6.98 percent, and the

—6205—

average return during the four years, 1937 to 1940, amounts to 3.27 percent.

Q. And are the notes on page 2 of this exhibit to be read as part of your statement? A. They are.

Mr. Milde: I offer in evidence Exhibit No. 126.

Mr. Reeder: May our objection be noted on the same grounds as to the previous exhibit?

Mr. Springer: May we have ruling reserved until cross examination is completed?

Trial Examiner: All right, go ahead.

Cross Examination by Mr. Springer.

Q. Mr. Sullivan, referring to Exhibit 126, on line 24, Federal income taxes on basis of tax rates in effect,—take the first column, for example, $324,758 for 1937? A. Yes.

Q. Is that the actual amount of taxes paid by the Hope Natural Gas Company in that year? A. No, the taxes paid have been adjusted to reflect the company's adjustments to operating expenses which would affect the Federal income tax. This computation is shown in a work sheet which will be presented as an exhibit.

Q. Do you conclude from your exhibit that the Hope Company would have paid more Federal income tax than it

—6206—

actually paid? A. This expense is based on the income tax the company would have paid if they received the additional revenues from gasoline royalties, and their operating expenses were reduced, due to reducing the price of coke-oven gas purchased from the Domestic Coke Corporation.

Q. Do you know whether or not the Hope Natural Gas Company plans to pay a deficiency assessment on its past taxes for 1937, 1938, 1939 and 1940, that you have indicated here? A. No, I do not, but I do think that if we consider for these years that they have additional revenue, that in order to be clear we must compute the additional taxes that would be payable on that additional revenue.

Q. Although you don't think the company will file an amended return and pay the additional taxes on the years you have set out in this exhibit? A. I don't know as to that.

Q. Now, the next line, line 25, Federal income tax at rate of 24 percent plus probable 6 percent surtax,—you show there in the column "Average of Years 1937-1939" the amount of $301,044, and in the column captioned "Average of Years 1937-1940" you show $507,580.

Has the company ever paid that probable 6 percent

—6207—

surtax? A. No, that probable 6 percent surtax is not yet in effect.

Q. Yet, you included in an average for the past years? A. But if the average for the past years is to be used in

testing the reasonableness of the rates in the future, the past years' expenses must be adjusted for known increases in taxes and pay rolls.

* * * * *

—6208—

Q. Did you hear the testimony of Mr. Tonkin that there is an unusual increase in the Hope Natural Gas Company's sales? A. I didn't hear Mr. Tonkin's testimony, but I do know of the increase in the sales. But I also have been informed that all that the present property could be expected to do was the experience that was achieved in the average of the years 1937 to 1939.

Q. Assuming that Hope Natural Gas Company's rates are reduced $1,000,000 on an annual basis, what kind of a test would your average figure give in that case? A. If the rates were reduced $1,000,000, I believe that the income taxes should be reduced 30 percent of that, or $300,000, which would leave an income tax of $1,044. Likewise, if they were increased $1,000,000, that tax should be increased to $600,000.

* * * * *

—6210—

Q. You didn't make any adjustments for known increases in revenues, did you? A. No, there is no adjustment to be made for known increases in revenues from the property as it existed at that period. By "existed," I mean the extent of the properties in this period.

Q. Well, you take for your exhibit future increases in expenses, but you ignore future increases in revenues? A. No, they haven't been ignored because it is the company's view that all that could be expected out of the property that existed on December 31, 1938 are sales that were apt to be experienced in that period.

Q. Of course, you know that the year 1940 showed a favorable operating result picture, about $5,000,000 on your

exhibit, in line 7, over the average of 1937 to 1939? A. Yes, I know that the sales for the year 1940 were substantially in excess of the average for the period 1937 to 1939,

—6211—

but this rate could only be maintained for a short period without substantial additions to the property.

Q. How do you know that? A. Well, I have been around these properties for about 10 years, and that is my impression, and while I am not testifying to it, it comes from discussions and what I believe to be so.

* * * * * *

—6212—

Q. Well, in your own exhibit, for the very next column, 1940, you show an increase in revenues, yet for your column average years of 1937 to 1939, you studiously include all known future expenses, but seem to leave out known increased revenues for 1940? A. Well, that is for the reason that it is our view that sales that were achieved during the years 1937 to 1939 would be all that the present property would be able to do; except for a short period of time, you would get a spurt in there, but you would have to make it up very shortly.

Q. Mr. Sullivan, in your column headed "Average of Years 1937-1939," and the figures appearing opposite line 25 and line 26 and line 28, which we have discussed as being expenses which will be incurred in the future, with an increase over the past years, they all affect your total in line 31, percent rate of return of 2.25 percent, do they not? A. Yes.

* * * * * *

—6215—

Q. Now do you think that you can set up an equitable standard for an average of any number of past years by taking into consideration only the known increase in operating expenses for the future, without taking into considera-

tion the known increases in revenues for the future? A. Well, the known increases in operating expenses and revenues, as applicable to the property as it existed at December 31, 1938, are reflected in this exhibit. There are going to be increases in expenses, but according to the testimony there will be no increase in revenues from the present properties, that is, those increases in revenues will only come through substantial additions to the present property.

Q. Do you know that there is an exhibit in this case comparing the first three months of 1941 with 1940 revenues, which shows a substantial increase in 1941 over 1940? A. I know that there is such an exhibit, yes.

Mr. Milde: For the first three months.

The Witness: Yes.

By Mr. Springer:

Q. You still didn't consider that in your Exhibit 126? A. Yes, it was given consideration at the time that this exhibit was made up.

—6216—

Q. Where does that appear in Exhibit 126? A. It is reflected by considering that, from the property as it existed in 1938, there could only be supplied from that property the average sales for the period 1937 to 1939, and any additional sales, except for a short period, would have to be supplied through substantial additions to the plant.

Q. Do you know whether or not there was any substantial addition to the Hope Company property in 1940 as compared with 1939, where your exhibit shows, in line 7, an increase in revenues of $5,000,000? A. I am not familiar with those figures, but I do know that if the sales continue at that rate, there will very shortly have to be substantial additions.

—6218—

Q. Now, Mr. Sullivan, did you deduct the accrued depletion from the rate base for your exhibit? A. No, the rate base used in this exhibit is the reproduction cost new less depreciation of the company's production, transmission and general properties as of December 31, 1938, and does not reflect any capital additions or increases in valuation due to increase in prices subsequent to that date, nor any additional accrued depreciation that has taken place in the company's properties since that date.

Q. And it reflects no retirements? A. No retirements and no additions.

* * * * *

—6227—

RE-DIRECT EXAMINATION by Mr. Milde.

Q. Mr. Sullivan, referring to your average columns for '37 to '39 and '37 to '40, as shown on page 1 of Exhibit 126, did I understand you to state that these increases in payrolls and this increase in Federal income tax rate, and increase in the unemployment tax, and the increase in the West Virginia property tax assessment are known increases in cost which have no reference to the amount of gas that the company might handle? A. That is correct.

Q. In other words, your view is that whether the company sells 50 billion, or 60 billion, or 40 billion, those expenses will be incurred irrespective—those increased expenses will be incurred irrespective of the volume of gas handled? A. Yes, I believe they will.

Mr. Milde: That is all.

* * * * *

## 23. COMMISSION WITNESS DUNN'S EXHIBIT NO. 90 ENTITLED: "Rate of Return Earned on Original Cost Base Years 1937 to 1940, Inclusive."

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## WRITTEN STATEMENT

The attached schedules have been prepared to summarize the plant costs, reserves and operating expenses for the four year period 1937 to 1940, inclusive, to show the profit earned and the rate of return on the original cost base. There are set forth certain rate adjustments proposed by the examiners which have not been made in the underlying exhibits, but are included here for the purpose of summarizing all costs expected to increase or decrease income in the future.

**Return Earned on Original Cost Base:**

Schedule No. 1 shows the average original cost base in the amount of $31,281,373. This amount includes production, transmission, distribution and general plant with the related reserves for depreciation and depletion deducted and the allowance for working capital added.

Net Operating Revenues are shown in the amount of $4,125,399 as the annual average for the four year period. The determination of net operating revenues, as adjusted, is shown by the income statements summarized on Schedule No. 1A. The expenses of the four year period are expected to serve as a guide for future operating costs; therefore, certain non-recurring expenses are not included in Schedule No. 1.

—2—

**Exploration and Development Costs:**

The actual costs and losses as set forth in accounts 510, 511 and 512 have been included as a deduction from net operating revenues for the four year period. Due to cancellations of unoperated acreage, delay rental cost is expected to be reduced in the future. However, the company is starting a program of exploratory deep drilling, and there is a known loss on the first of these deep wells of

approximately $200,000.00 due to a well completed dry in 1941. For this reason it is believed proper to include the full amount of exploration and development costs as shown.

**Interest on Unoperated Acreage:**

Interest on unoperated acreage has been included as a deduction from net operating revenues. The investment has been classified as Gas Plant Held for Future Use which is not included in Gas Plant in Service. The examiners propose the allowance in operating expenses of interest as a carrying cost of the investment. A rate of 6% has been used pending the decision by the Commission as to a fair rate of interest.

The minor adjustment on Gas Plant Held for Future Use relates to adjusting entries 338 and 342, Exhibit No. 57A. Certain wells and field lines not used in prior years were placed in service in 1940.

It is proposed to amortize property reclassification and rate case expenditures over a period of ten years, being a period of six years in the future.

—3—

**Adjustment of Income Taxes:**

The income taxes actually paid were included in the taxes account. This adjustment removes the Federal Income Taxes pending the determination of a fair return by the Commission and the computation of the indicated taxes on income at the latest tax rate.

For Federal Income Tax purposes certain deductions and allowances are made which are not recorded on the books or set forth in the examiners' income statements. To illustrate a method for the Commission to use in estimating an allowance for future income taxes, giving effect to whatever reduction in revenues may be ordered by the Commission, the following tabulation is submitted:

| | 1937 | 1938 | 1939 | 1940 | Average |
|---|---|---|---|---|---|
| Income Taxes Paid | $ 282,315 | $ 17,515 | $ 191,524 | $ 912,313 | $ 350,916 |
| Income Tax Rate | 14.9386% | 16.5% | 16.5% | 24% | — |
| Net Taxable Income | $1,889,830 | $106,150 | $1,160,733 | $3,801,304 | $1,739,504 |
| Assumed Reduction (for illustration only) | | | | | 1,000,000 |
| Revised Net Taxable Income | | | | | 739,504 |
| Tax Rate in Effect | | | | | .24 |
| Allowance for Income Tax (illustrative only) | | | | | $ 177,481 |

Schedule No. 1 shows the annual average return earned in the amount of $3,809,201 and the average rate of return earned on the original cost base as 12.18%.

—4—

**Return Earned on Original Cost Base, Exclusive of Distribution Plant, using Company Method.**

The company's method of determining return applicable to interstate sales avoids an allocation of costs to West Virginia domestic and industrial consumers. The rates to these consumers are subject to West Virginia regulation, and such sales amount to less than 20% of the total.

Company Exhibit No. 37 sets forth certain reasons why the method of crediting the revenue received from the local distribution of gas in West Virginia in excess of specific distribution costs to the production, transmission and general costs, should be adopted.

> "The return is worked out on the premise that the Company's local West Virginia business is unavoidable in carrying out its major business of exporting gas from West Virginia; and that these local sales being subject to West Virginia regulation, the remainder of the gross revenues therefrom after deducting specific distribution costs, is the full contribution of the West Virginia consumers towards the costs incurred jointly on account of all gas sold. The cost of the gas exported from the state is thus the Company's total production, transmission and general expenses after crediting this remainder of the revenue from

local distribution of gas after deducting specific distribution costs.'"

Schedule No. 2 sets forth the plant costs, revenues and operating costs which are taken from the other accounting exhibits. Schedule No. 2A shows the gas service revenues other than interstate sales and the specific costs which have



been deducted. Return is computed at an assumed 6% on net original cost of distribution plant, including an allowance for working capital.

Schedule No. 1 shows the annual average rate of return earned at 12.18% on the total base as compared with 12.53% on the interstate base, shown by Schedule No. 2. The difference in return earned and the rate is $104,535, representing the return on distribution plant included in Schedule No. 2.

Washington, D. C.
June 2, 1941.

EDWARD L. DUNN,
*Examiner in Charge of Field Assignment.*

Approved:

W. E. BAKER,
*Chief Accountant.*

CHAS. W. SMITH,
*Chief, Bureau of Accounts, Finance and Rates.*

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Schedule No. 1

## HOPE NATURAL GAS COMPANY

### Rate of Return Earned on Original Cost Base
### Years 1937 to 1940, Inclusive

| | Year Ended December 31 | | | | 4 Year Average |
|---|---|---|---|---|---|
| | 1937 | 1938 | 1939 | 1940 | |
| Original Cost of Gas Plant in Service | Same as | $54,022,699 | $54,020,330 | $55,174,551 | $54,310,070 |
| Reserves for Depreciation and Depletion | 1938 | 24,807,523 | 25,423,364 | 26,076,378 | 25,278,697 |
| Net Original Cost | | 29,215,176 | 28,596,966 | 29,098,173 | 29,031,373 |
| Working Capital | | 2,250,000 | 2,250,000 | 2,250,000 | 2,250,000 |
| Original Cost Base | $31,465,176 | $31,465,176 | $30,846,966 | $31,348,173 | $31,281,373 |
| Net Operating Revenues | $ 4,111,672 | $ 2,133,121 | $ 3,874,557 | $ 6,382,247 | $ 4,125,399 |
| **Examiners' Rate Adjustments:** | | | | | |
| Exploration and Development Costs | 501,076 | 612,242 | 500,344 | 407,920 | 505,396 |
| 6% Interest on Unoperated Acreage | 35,063 | 35,063 | 35,063 | 35,063 | 35,063 |
| Adjustment of Gas Plant Held for Future Use | | | | 6,619 | 1,655 |
| Amortization of Rate Case Expenses | 125,000 | 125,000 | 125,000 | 125,000 | 125,000 |
| Adjustment of Income Taxes | ( 282,315) | ( 17,515) | ( 191,521) | ( 912,313) | ( 350,916) |
| Return Earned | $ 3,732,848 | $ 1,378,331 | $ 3,405,675 | $ 6,719,958 | $ 3,809,201 |
| Rate of Return Earned | 11.86% | 4.38% | 11.04% | 21.45% | 12.18% |

( ) Denote red figures.

Docket G-113

Schedule No. 2

## HOPE NATURAL GAS COMPANY

### Rate of Return Earned on Original Cost Base, Exclusive of Distribution Plant, Using Company Method

| Description | 1937 | 1938 | 1939 | 1940 | Average 1937-1940 |
|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | |
| Original Cost of Gas Plant in Service, Exclusive of Distribution Plant | Same as | $51,207,621 | $51,099,024 | $52,064,557 | $51,394,706 |
| Reserves for Depreciation and Depletion | 1938 | 23,501,356 | 24,072,167 | 24,683,271 | 23,939,538 |
| Net Original Cost | | 27,706,265 | 27,026,857 | 27,381,286 | 27,455,168 |
| Working Capital | | 2,100,000 | 2,100,000 | 2,100,000 | 2,100,000 |
| Original Cost Base for Interstate Sales | $29,806,265 | $29,806,265 | $29,126,857 | $29,481,286 | $29,555,168 |
| **Operating Revenues from Interstate Business** | | | | | |
| The East Ohio Gas Company | $12,757,670 | $11,157,537 | $12,359,500 | $14,725,648 | $12,750,089 |
| The Peoples Natural Gas Company | 1,244,635 | 1,019,044 | 1,371,757 | 3,457,207 | 1,773,161 |
| The River Gas Company | 115,725 | 77,915 | 83,174 | 137,151 | 103,491 |
| Fayette County Gas Company | 267,531 | 263,966 | 264,725 | 270,618 | 266,710 |
| The Manufacturers Light & Heat Company | 1,425,050 | 1,258,602 | 787,738 | 706,131 | 1,044,380 |
| Total Interstate Revenues | $15,810,611 | $13,777,064 | $14,866,894 | $19,296,755 | $15,937,831 |
| **Operating Revenue Deductions, exclusive of Specific Distribution Costs** | | | | | |
| Natural Gas Production | $ 1,106,896 | $ 1,367,877 | $ 1,135,864 | $ 1,214,307 | $ 1,206,236 |
| Other Production Expenses | 8,160,524 | 7,671,133 | 7,630,871 | 8,493,753 | 7,989,070 |
| Transmission Expenses | 1,697,806 | 1,603,809 | 1,432,856 | 1,761,019 | 1,623,872 |
| Administrative and General Expenses | 913,999 | 886,828 | 808,908 | 839,506 | 862,311 |
| Depreciation | 1,346,945 | 1,262,391 | 1,214,641 | 1,423,863 | 1,311,960 |
| Amort. and Depl. of P. N. G. L. & L. R. | 40,704 | 31,408 | 36,772 | 57,084 | 41,492 |
| Amort. of Other Limited-Term G. I. | | 813 | 6,369 | 5,996 | 3,295 |
| Taxes | 1,318,110 | 1,001,688 | 1,227,674 | 2,034,284 | 1,395,439 |
| Total | $14,584,984 | $13,825,947 | $13,493,955 | $15,829,812 | $14,433,675 |
| **Examiners' Rate Adjustments** | | | | | |
| 6% Interest on Unoperated Acreage | $ 35,063 | $ 35,063 | $ 35,063 | $ 35,063 | $ 35,063 |
| Exploration and Development Costs | 501,076 | 612,242 | 500,344 | 407,920 | 505,395 |
| Amortization of Property Reclassification and River Rate Expenditures | 125,000 | 125,000 | 125,000 | 125,000 | 125,000 |
| Other Revenue | ( 85,260) | ( 62,645) | ( 68,695) | ( 107,171) | ( 80,943) |
| Adjustment of Federal Income Taxes | ( 282,315) | ( 17,515) | ( 191,521) | ( 912,313) | ( 350,916) |
| Adjustment of Gas Plant Held for Future Use | | | | 6,619 | 1,655 |
| Revenue from West Virginia Sales | (2,697,396) | (2,019,825) | (2,329,716) | (2,696,120) | (2,435,764) |
| Total Examiner's Rate Adjustments | $(2,403,832) | $(1,327,680) | $(1,929,525) | $(3,141,002) | $(2,200,310) |
| Net Operating Income from Interstate Sales | $ 3,629,459 | $ 1,278,797 | $ 3,302,464 | $ 6,607,945 | $ 3,704,666 |
| Rate of Return Earned | 12.18% | 4.29% | 11.34% | 22.41% | 12.53% |

( ) Denote red figures.

## 24. TESTIMONY OF COMPANY WITNESS LORING L. TONKIN AS TO ABILITY OF THE COMPANY TO MEET WAR DEMANDS, SATURDAY, JULY 12, 1941, RECORD PAGES 5764 TO 5771.

—5764—

By Mr. Cockley:

Q. Mr. Tonkin, have you in mind any other capital expenditures made by the Hope Company during these years other than those set forth in these, as related directly to your present production, transmission, and general property as set forth in this exhibit? A. Yes, we have. These would be our normal expenditures, but we have in mind, as I told you, on this year's budget, I had another $100,000 that I haven't had approved, but I have already authorized the expenditure.

We are finding ourself in a rather peculiar situation. Our normal sales of gas of the Hope system go around

—5765—

52,000,000,000 feet of gas a year. I think around 51,500,000,000. The average for the last 10 years has been slightly under 50,000,000,000 feet, and that has been running along for years.

You take the 20 year average. We have settled in our own mind that a normal year for the Hope Company is right around 52,000,000,000 feet sales.

Now, we come to the point where our sales in 1940, due largely to increase in industrial sales due to the emergency for the preparedness program, have jumped very rapidly, far beyond what we could have anticipated for gas reserves and gas supplies.

In other words, in 1940 we sold approximately 65,000,000,000 feet compared to a normal year of less than 52,000,000,000.

Q. Now, you are not including in any of these figures the sales by the old Reserve Company? A. Anything I am talking about today does not include anything in the Reserve Gas Company property.

Q. All right. A. As I say, in 1940 we actually sold almost 65,000,000,000 feet. Just slightly under 65,000,000,000, and in 1941 it looks like we are going to sell in excess of 70,000,000,000 feet.

Now, when you jump from 52,000,000,000 to 70,000,-

—5766—

000,000, within a year and a half, or two years, you might say, you are drawing on your reserves more than we could have foreseen several years ago and, therefore, we have to do something else to replace that if we are going to take care of our customers.

Q. Is it possible for you to replace that gas in West Virginia? A. It is not.

Q. What is going to be your situation as to supply in West Virginia, assuming that that demand that you have spoken of is maintained? A. Well, the supply in West Virginia is at its peak right now as far as any gas the Hope Company can get its hands on.

The Oriskany field in Kanawha county, rock pressure is dropping off.

This summer we have not been able to get accurate figures on it, but I would say the rock pressure was dropping off from a pound and a half to two pounds a day in the Oriskany field in Kanawha county.

Everybody is drawing on it. We are drawing very heavily on it, United Fuel and other people.

—5767—

Q. What do you estimate you will get out of the Oriskany Field this coming winter? A. We expect to get probably 72, maybe 75 million feet of gas a day out of that Oriskany Field in Kanawaha County.

Q. You mean a peak delivery of approximately that? A. No. We are taking better than 80 million right today out of it.

Q. This coming winter you expect that to drop to 72 million? A. That will drop to 72, and we hope it will hold up to 75.

Q. And how much can you count on for the following winter? A. The following winter, the best we can judge—we have had our superintendents out watching the decline all around—and we will not get out of that field, in my estimation, over 30 or 35 million feet a day the year after this winter we are coming to.

Q. Now, Mr. Tonkin, what is your solution of this problem? A. Well, the solution of the problem—and we have already started on it—and that is where my hundred thousand dollars comes in—we have started a survey from Cornwell Station down through that part of West Virginia,

—5768—

southern West Virginia, through the entire state of Kentucky, the entire state of Tennessee, the entire state of Mississippi, the corner of Arkansas, in northern Louisiana, with a survey. We have eleven crews on the job now and have been on the job since early in May.

The survey is either half or a little over half completed. Right of way crews are right with the surveyors, and we are for a prospective line to Louisiana, making that survey and later drawing on the fields—that is, northern Louisiana; I am speaking of Monroe, Louisiana, field—and later drawing on the gas from East Texas and the Gulf Coast of Louisiana, where there are enormous resources of gas in that region.

Q. Well, how far, at present, are you contemplating building that line? A. The line will be approximately 826 miles long, 20 inches in diameter and built for high pressure.

Q. Built for high pressure? A. Yes.

Q. And what do you estimate that line will cost? A. Approximately 25 million dollars, if we stop at Monroe, Louisiana, field.

Q. And that includes, I presume, the compressor stations and the other appliances that are necessary to put

—5769—

the line into effect. A. That includes the compressor stations, the five relay stations, and one field station on that line, a total of six at the present time.

Q. Will you tell me what the fact is as to whether or not you are building that line in order to serve markets other than those that you are now serving, your company and your affiliated companies? A. No. We are building that line to serve the markets of our customers. The fact of the matter is we have been thinking of this line for some time, but we did not think we would have to build it for another five years, but this severe demand upon us, that we have struck in the last year and a half, you might say, and apparently is continuing on through '41, due to the emergency of the preparedness program, has drawn down on our reserves for peak loads, I might say—that we find that we have got to jump ahead of ourselves if we are going to supply our customers.

In other words, we have been through this period once before. After the last world war, during the world war and shortly after, we had enormous demands upon the Hope Company for a supply of gas, due chiefly to industrial war demands, you might say.

We depleted our reserves very rapidly in those days and from 1919 to 1925 we had to spend, on account of this depletion, or the lessening of our ability to deliver—as

—5770—

maybe you better word it—we had to spend between 7½ to 8 million dollars over and above our normal capital expenditures, to go to southern West Virginia, to replenish our gas supply.

Now, that was caused by depleting our supplies, due to the war period.

Now we are facing identically the same thing today. If this emergency keeps up we are going to have to do something but the supplies are not available in West Virginia. Therefore we have investigated Kentucky.

There is a lot of shale gas down there and we have had our geologists down there.

Mr. Tollefson has been down there, and we have had other men down there, and there is not enough gas available in Kentucky at a reasonable price.

In other words, we figure it will cost us more to get it up from Kentucky than it will from Louisiana, so Mr. Tollefson has been many weeks in Louisiana investigating it with other geologists, and we have decided that, if this emergency keeps up the only thing to do is to go on through to Louisiana with the idea of later drawing on East Texas and Southern Louisiana for gas.

Q. At the present time the reserves in Louisiana are ample for— A. (Interposing) At the present time,



around in the Monroe field, they are ample for a few years, but eventually we would have to receive gas from East Texas and southern Louisiana, where the reserves are—well, they are as big as the ocean, I guess.

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## COMPLAINT OF CITY OF CLEVELAND AGAINST HOPE NATURAL GAS COMPANY

Filed July 6, 1938—F. P. C. Docket No. G–100

1 The City of Cleveland brings this its complaint against Hope Natural Gas Company and for its cause of action avers:

First: Complainant, the City of Cleveland (hereinafter for convenience termed "Cleveland"), is a municipal corporation duly organized and existing under the laws and Constitution of the State of Ohio, and is a municipality within the meaning of the Natural Gas Act.

Second: Defendant, Hope Natural Gas Company (hereinafter for convenience designated as "Hope"), is a corporation duly organized and existing under the laws of the State of West Virginia, has its principal place of business in the City of Pittsburgh in the State of Pennsylvania, and is a natural gas company engaged in the transportation of natural gas in interstate commerce and the sale in interstate commerce of such gas for resale and is a public utility within the meaning of the Natural Gas Act.

2 Third: The only company distributing natural gas in Cleveland is The East Ohio Gas Company (hereinafter for convenience termed "East Ohio"), a wholly owned subsidiary of the Standard Oil Company (New Jersey), which purchases approximately 70 percent of the gas which it merchandises in Ohio from the defendant Hope, likewise a wholly owned subsidiary of the Standard Oil Company (New Jersey), said gas being produced in the State of West Virginia and delivered to East Ohio at the Ohio River.

Fourth: The price charged by defendant Hope to East Ohio for resale to consumers in Cleveland and elsewhere for all gas including domestic, commercial and regular industrial gas, and except only certain gas sold for resale to large industrial consumers under special contract, is 38½ cents per M. c. f. A copy of the Hope-East Ohio contract is filed herewith and made a part hereof as fully as though physically incorporated herein. Under said Hope-East Ohio contract, East Ohio pays to Hope annually a total of approximately $13,000,000.

Fifth: The price charged by defendant Hope to East Ohio for natural gas for resale to domestic, commercial and small indus-

trial consumers in Cleveland and elsewhere is excessive, unjust, unreasonable, greatly in excess of the price charged by Hope to nonaffiliated companies at wholesale for resale to domestic, commercial, and small industrial consumers, and greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio, and therefore is further unduly discriminatory between customers and between classes of service.

Sixth: On May 20, 1937, the City of Cleveland passed a rate ordinance No. 106556, regulating and fixing the prices and terms upon which East Ohio shall furnish natural gas for and during the period from June 30, 1937 until July 1, 1939. East Ohio has appealed from said ordinance to The Public Utilities Commission of Ohio, and has suspended the ordinance rates by the filing of a bond to refund to its customers in Cleveland the excess collected in the interim over and above the ordinance rate or any other rate found to be fair by The Public Utilities Commission of Ohio. In this proceeding, now pending before The Public Utilities Commission of Ohio and known as Case No. 10202 on its docket, East Ohio seeks to include in operating expenses said price of 38½ cents per M. c. f. paid by it to its affiliate, the defendant Hope, at the rate fixed in said intercorporate contract between Hope and East Ohio for natural gas delivered at the Ohio River for transportation to and resale in Cleveland and elsewhere, commonly known as the River Rate.

A determination by this Honorable Commission of the fair, just, and reasonable rate for gas sold by Hope to East Ohio at the Ohio River should be of assistance in the cases of Cleveland and other Ohio municipalities now pending before The Public Utilities Commission of Ohio and is essential to the determination of a fair, just, and reasonable rate for natural gas in Cleveland after the expiration of the present ordinance approximately one year hence.

Seventh: The filing of this petition has been authorized and directed by resolution of the Council of the City of Cleveland adopted July 1, 1938.

Wherefore, Complainant prays for an investigation by the Federal Power Commission, a finding that said River Rate is excessive, unreasonable, and unjustly discriminatory, and for the fixing of a just, fair and reasonable rate.

## ANSWER OF HOPE NATURAL GAS COMPANY TO COMPLAINT OF THE CITY OF CLEVELAND

Filed August 18, 1938—F. P. C. Docket No. G-100

1 Hope Natural Gas Company, hereinafter called "Hope," for its answer to the petition herein filed—.

1. Admits the allegations contained in paragraph First of the petition.

2. Admits the allegations contained in paragraph Second of the petition.

3. Admits the allegations contained in paragraph Third of the petition.

4. Admits that the copies of its contracts with The East Ohio Gas Company, hereinafter called "East Ohio," filed with the petition, are true copies and begs leave to refer thereto for an exact statement of the price and the other terms and conditions of these contracts. Admits that under said contracts East Ohio paid to Hope for natural gas delivered thereunder during the year 1937 the sum of $12,757,670 for 35,074,416 M. c. f. of natural gas or an average price of 36.37¢ per M. c. f.

5. (a) Denies the allegations of paragraph Fifth of the petition in their entirety.

(b) As to the charge that the contract price between Hope and East Ohio for natural gas for resale to domestic, commercial and small industrial consumers is excessive and unreasonable, Hope avers that said price does and not has not in any recent
2 years been sufficient to yield more than a fair return on the fair value of its property devoted to that service; that this price since 1921 has been repeatedly investigated by the cities of Cleveland and Akron, Ohio, and by The Public Utilities Commission of Ohio, all of whom have made valuations of Hope's property, audited its operating expenses and otherwise investigated its property and operations, and that said price was recently approved by said Commission for the years 1933 to 1937 *In re East Ohio Gas Company*, 17 P. U. R. (N. S.) 433, and is now being reexamined by said Commission in the present controversy between East Ohio and the City of Cleveland arising out of the ordinance of May 20, 1937, referred to in the petition.

(c) As to the charge that this contract price to East Ohio is "greatly in excess of the price charged by Hope to nonaffiliated companies" and others and is therefore discriminatory, Hope avers that the differences in prices provided by its contracts with

East Ohio and with nonaffiliated companies arise solely out of differences in the terms and conditions of service; that Hope's contracts with nonaffiliated companies are expressly subordinated to the rights of the domestic consumers of East Ohio, among others, in the event of a shortage; that these contracts with nonaffiliated companies specify yearly, monthly and daily deliveries with limited variations therefrom and provide for deliveries principally at points in Hope's producing fields at low pressures, any further work of compression and transmission in West Virginia being performed by the purchasers. In the case of Hope's contract with East Ohio the requirements of the domestic consumers of that company are given preference over the consumers of all nonaffiliated purchasers; Hope's obligation is to deliver to East Ohio the requirements of the latter's domestic consumers in Ohio, whatever these requirements may be, and to deliver gas at the Ohio River at pressures sufficient to carry the gas to consumers' burner tips throughout the territory served by East Ohio. The latter company is not required to and does not maintain compressing stations for the transmission and distribution of this gas in Ohio. These substantial differences and others in the terms and conditions of service under Hope's contracts with East Ohio and with nonaffiliated companies are the basis for the differences in prices specified therein.

(d) As to the charge that this contract price is "greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio" and is therefore unduly discriminatory, Hope avers that said industrial gas is not sold by East Ohio to favored consumers but under con-
3 tracts and schedules duly filed with and approved by The Public Utilities Commission of Ohio, such schedules being applicable to all consumers using the specified quantities and willing to accept service under the terms offered; that such gas is sold subject to interruption when necessary to furnish a full supply to other consumers and under a high load factor; that East Ohio receives for this gas as much as it can be sold for in competition with other fuels; that the sale of such gas by East Ohio and Hope at the prices received enables both companies to sell regular gas at lower prices than would otherwise be possible; that the discount thereon provided in said Hope-East Ohio contract is based on the special terms and conditions of service applicable to such gas, and is not unduly discriminatory.

6. (a) As to paragraph Sixth of the petition, Hope admits that on May 20, 1937, the City of Cleveland passed an ordinance as stated in the petition; admits that East Ohio has appealed from said ordinance to The Public Utilities Commission of Ohio; avers that the average rate previously in effect for domestic consumers in the City of Cleveland was substantially 57¢ per M. c. f., whereas the ordinance of May 20, 1937 fixes a rate that would average approximately 55½¢ per M. c. f.; avers that upon appealing to said Public Utilities Commission in accordance with the provisions of the Public Utilities Act of Ohio, East Ohio filed a bond to refund to consumers in Cleveland such part, if any, of the 1½¢ difference between said two rates as the Commission might subsequently find to be excessive; admits that in said proceeding now pending before The Public Utilities Commission of Ohio, East Ohio has included in operating expenses the sums paid by it to Hope for gas at the Ohio River at the present rate fixed in said contracts heretofore referred to.

(b) Hope denies that a determination by this Honorable Commission of the fair rate for gas sold by Hope to East Ohio at the Ohio River will be of any assistance in the case of the City of Cleveland now pending before The Public Utilities Commission of Ohio, averring that said Commission is required to determine the fairness of said contract price as of June 30, 1937, the effective date of said ordinance; that said Commission has had submitted to it and is checking and investigating complete inventories, valuations, operating expenses and other pertinent information relating to Hope; that such evidence has been submitted not only by East Ohio but much of it by the representatives of the City of Cleveland; and that both the representatives of the City of Cleveland and of The Public Utilities Com-
4 mission of Ohio have had access at all times to the books, records and property of Hope in so far as said Commission deemed pertinent. Hope respectfully suggests that while this Honorable Commission is given the power to determine interstate rates prospectively, it is not given the power to determine whether the rate in effect on June 30, 1937 was or was not unreasonable or unlawful.

(c) Hope denies that a determination of a fair contract price between East Ohio and Hope by this Honorable Commission is essential to the determination of a fair and reasonable rate for natural gas in Cleveland either now or after the expiration of the present ordinance in June, 1939. It averds that in repeated rate

controversies between the Cities of Cleveland and Akron and East Ohio since 1921 the Ohio courts or Public Utilities Commission hearing such controversy has in each instance imposed upon East Ohio the burden of proving that the prices at the time paid to Hope and reflected in its operating expenses were fair and reasonable prices; that in connection with the trial of said cases the engineers, accountants and attorneys of the respective cities have had access to the properties, books and records of Hope in so far as these were essential in determining Hope's costs; that the City of Cleveland had reports of its own engineers and accountants on Hope's properties and operations as of 1921, again as of 1928, again as of 1931 and again as of 1937, and additionally that the City of Akron had similar reports as of 1932. Because of the common ownership of the stock of Hope and East Ohio The Public Utilities Commission of Ohio, the City of Cleveland and East Ohio have all assented to the position in the present controversy pending before said Commission that the contract price between the two affiliated companies at the river is not even prima facie evidence of its fairness and both parties introduced evidence as to, and the Commission itself is investigating, the value of the properties of Hope, its operations and its operating expenses in as complete detail as for East Ohio. Moreover, the Commission in former cases involving East Ohio rates has allowed as an operating expense to East Ohio the sums paid to Hope on account of gas delivered at the Ohio River only to the extent that it found them to be fair and reasonable. In the present Cleveland case the matter is being submitted to the Commission by all parties on the assumption that the Commission will again decide and allow in East Ohio's operating expenses whatever it finds to be the fair and reasonable river rate as of June 30, 1937, not exceeding, however, the price actually paid. In view of the facts hereinabove stated Hope
5 avers that the properties, records, and operations of East Ohio and Hope, and their relations, have been under almost continuous investigation by the Cities of Cleveland and Akron for the past ten years and by The Public Utilities Commission of Ohio for the past seven years and denies that the exercise by this Commission of its jurisdiction as sought in the petition is necessary to enable either the City of Cleveland or said Commission to fix a fair rate for natural gas service in Cleveland or elsewhere.

7. Admits the allegations contained in paragraph Seventh of the petition.

## COMPLAINT OF THE CITY OF AKRON AGAINST HOPE NATURAL GAS COMPANY

Filed July 25, 1938—F. P. C. Docket No. G-101

1 The city of Akron, Ohio, brings this its complaint against Hope Natural Gas Company and for its cause of action avers:

First: Complainant, the City of Akron (hereafter for convenience termed "Akron"), is a municipal corporation duly organized and existing under the laws and Constitution of the State of Ohio, and is a municipality within the meaning of the Natural Gas Act.

Second: Defendant, Hope Natural Gas Company (hereinafter for convenience designated as "Hope"), is a corporation duly organized and existing under the laws of the State of West Virginia, has its principal place of business in the City of Pittsburgh in the State of Pennsylvania, and is a natural gas company engaged in the transportation of natural gas in interstate commerce and the sale in interstate commerce of such gas for resale and is a public utility within the meaning of the Natural Gas Act.

Third: The only company distributing natural gas in Akron is The East Ohio Gas Company (hereinafter for convenience termed "East Ohio"), a wholly owned subsidiary of the Standard Oil Company (New Jersey), which purchases approximately 70 per cent of the gas which it merchandises in Ohio from the
2 defendant Hope, likewise a wholly owned subsidiary of the Standard Oil Company (New Jersey), said gas being produced in the State of West Virginia and delivered to East Ohio at the Ohio River.

Fourth: The price charged by defendant Hope to East Ohio for resale to consumers in Akron and elsewhere for all gas including domestic, commercial and regular industrial gas, and except only certain gas sold for resale to large industrial consumers under special contract, is 38½ cents per M. c. f. A copy of the Hope-East Ohio contract is filed herewith and made a part hereof as fully as though physically incorporated herein. Under said Hope-East Ohio contract, East Ohio pays to Hope annually a total of approximately $13,000,000.

Fifth: The price charged by defendant Hope to East Ohio for natural gas for resale to domestic, commercial and small industrial consumers in Akron and elsewhere is excessive, un-

just, unreasonable, greatly in excess of the price charged by Hope to nonaffiliated companies at wholesale for resale to domestic, commercial, and small industrial consumers, and greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio, and therefore is further unduly discriminatory between customers and between classes of service.

Sixth: On May 11, 1937, the City of Akron passed a rate ordinance, No. 136–1937, regulating and fixing the prices and terms upon which East Ohio shall furnish natural gas for
3 and during the period from June 10, 1937 until July 10, 1941.

East Ohio has appealed from said ordinance to The Public Utilities Commission of Ohio, and has suspended the ordinance rates by the filing of a bond to refund to its customers in Akron the excess collected in the interim over and above the ordinance rate or any other rate found to be fair by The Public Utilities Commission of Ohio. In this proceeding, now pending before The Public Utilities Commission of Ohio and known as Case No. 10162 on its docket, East Ohio seeks to include in operating expenses said price of 38½ cents per M. c. f. paid by it to its affiliate, the defendant Hope, at the rate fixed in said intercorporate contract between Hope and East Ohio for natural gas delivered at the Ohio River for transportation to and resale in Akron and elsewhere, commonly known as the River Rate.

A determination by this Honorable Commission of the fair, just, and reasonable rate for gas sold by Hope to East Ohio at the Ohio River should be of assistance in the cases of Akron and other Ohio municipalities now pending before The Public Utilities Commission of Ohio and is essential to the determination of a fair, just, and reasonable rate for natural gas in Akron after the expiration of the present ordinance.

Seventh: The filing of this petition has been authorized and directed by resolution of the Council of the City of Akron adopted July 5, 1938.

Wherefore, Complainant prays for an investigation by
4 the Federal Power Commission, a finding that said River Rate is excessive, unreasonable, and unjustly discriminatory, and for the fixing of a just, fair, and reasonable rate.

## ANSWER OF HOPE NATURAL GAS COMPANY TO COMPLAINT OF THE CITY OF AKRON

Filed August 26, 1938—F. P. C. Docket No. G-101

1 Hope Natural Gas Company, hereinafter called "Hope," for its answer to the petition herein filed—

1. Admits the allegations contained in paragraph First of the petition.

2. Admits the allegations contained in paragraph Second of the petition.

3. Admits the allegations contained in paragraph Third of the petition.

4. Admits that the copies of its contracts with The East Ohio Gas Company, hereinafter called "East Ohio," filed with the petition, are true copies and begs leave to refer thereto for an exact statement of the price and the other terms and conditions of these contracts. Admits that under said contracts East Ohio paid to Hope for natural gas delivered thereunder during the year 1937 the sum of $12,757,670 for 35,074,416 M. c. f. of natural gas or an average price of 36.37¢ per M. c. f.

5. (a) Denies the allegations of paragraph Fifth of the petition in their entirety.

(b) As to the charge that the contract price between Hope and East Ohio for natural gas for resale to domestic, commercial, and small industrial consumers is excessive and unreasonable, Hope avers that said price does not and has not in any recent years

2 been sufficient to yield more than a fair return on the fair value of its property devoted to that service; that this price since 1921 has been repeatedly investigated by the cities of Cleveland and Akron, Ohio, and by The Public Utilities Commission of Ohio, all of whom have made valuations of Hope's property, audited its operating expenses and otherwise investigated its property and operations, and that said price was recently approved by said Commission as more particularly set forth in paragraph 6 (a) hereof, and is now being reexamined by said Commission in the present controversy between East Ohio and the City of Akron arising out of the ordinance of May 11, 1937, referred to in the petition and upon East Ohio's appeal to said Commission from an ordinance of the City of Cleveland passed May 20, 1937, prescribing East Ohio's rates in Cleveland for a period of two years from June 30, 1937. Said Cleveland ordinance and said

proceeding thereon before said Commission are fully described in the petition and answer of the parties in *City of Cleveland* vs. *Hope Natural Gas Company*, No. G-100 before this Honorable Commission. Hope begs leave to refer to said petition and answer for a more complete statement of said Cleveland ordinance and said proceeding.

(c) As to the charge that this contract price to East Ohio is "greatly in excess of the price charged by Hope to nonaffiliated companies" and others and is therefore discriminatory, Hope avers that the differences in prices provided by its contracts with East Ohio and with nonaffiliated companies arise solely out of differences in the terms and conditions of service; that Hope's contracts with nonaffiliated companies are expressly subordinated to the rights of the domestic consumers of East Ohio, among others, in the event of a shortage; that these contracts with nonaffiliated companies specify yearly, monthly, and daily deliveries with limited variations therefrom and provide for deliveries principally at points in Hope's producing fields at low pressures, any further work of compression and transmission in West Virginia being performed by the purchasers. In the case of Hope's contract with East Ohio the requirements of the domestic consumers of that company are given preference over the consumers of all nonaffiliated purchasers; Hope's obligation is to deliver to East Ohio the requirements of the latter's domestic consumers in Ohio, whatever these requirements may be, and to deliver gas at the Ohio River at pressures sufficient to carry the gas to consumers' burner tips throughout the territory served by East Ohio. The latter
3 company is not required to and does not maintain compressing stations for the transmission and distribution of this gas in Ohio. These substantial differences and others in the terms and conditions of service under Hope's contracts with East Ohio and with nonaffiliated companies are the basis for the differences in prices specified therein.

(d) As to the charge that this contract price is "greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio" and is therefore unduly discriminatory, Hope avers that said industrial gas is not sold by East Ohio to favored consumers but under contracts and schedules duly filed with and approved by The Public Utilities Commission of Ohio, such schedules being applicable to all consumers using the specified quantities and willing to accept service under the terms offered; that such gas is sold subject to interruption when neces-

sary to furnish a full supply to other consumers and under a high load factor; that East Ohio receives for this gas as much as it can be sold for in competition with other fuels; that the sale of such gas by East Ohio and Hope at the prices received enables both companies to sell regular gas at lower prices than would otherwise be possible; that the discount thereon provided in said Hope-East Ohio contract is based on the special terms and conditions of service applicable to such gas, and is not unduly discriminatory.

6. (a) As to paragraph Sixth of the petition Hope avers that prior to May 19, 1932, East Ohio was collecting in the City of Akron, pursuant to an ordinance contract between East Ohio and Akron, a domestic rate averaging a little more than 64¢ per M. c. f. Effective May 19, 1933, the electors of the City of Akron enacted an initiated ordinance for a four-year period ending May 19, 1937, which provided a domestic rate averaging about 50¢ per M. c. f.

East Ohio appealed to The Public Utilities Commission of Ohio from this latter ordinance and in accordance with the statutes of Ohio elected to collect under bond the rate theretofore in effect. The City of Akron employed the same engineers, accountants and geologists who had theretofore and have since represented the City of Cleveland in rate controversies with East Ohio and presented to the Commission, as did East Ohio, complete testimony as to the value of Hope's property, its operating expenses and its operations. For this purpose they were given access to Hope's properties, books, and records insofar as these bore on Hope's costs of gas.

4 On February 1, 1937, said Commission made its findings and order and thereby found the rate fixed by said ordinance effective May 19, 1933, to be unjust and unreasonable and fixed a rate to be substituted therefor averaging 62.35¢ per M.c.f.

In its findings said Commission valued the property of Hope and determined its operating expenses in precisely the same detail as it did for East Ohio. It further found that he contract price of 38½¢ paid by East Ohio to Hope and here under attack, was a fair and reasonable price and allowed the same in the amount paid by East Ohio as a part of its operating expenses. The findings and order of said Commission are published in *Re East Ohio Gas Company*, 17 P. U. R. (N. S.) 433, and Hope begs leave to refer to the extensive and detailed findings there made insofar as here material.

Both East Ohio and the City of Akron prosecuted error from said findings and final order of the Commission to the Supreme Court of Ohio which affirmed said order of the Commission setting aside said 1933 ordinance rate as unreasonable and unlawful, but reversed said order and finding fixing a new rate and directed said Commission to modify the same in certain minor respects, the effect of which Hope avers will be to increase the rate to be finally fixed by said Commission. For a more complete statement Hope begs leave to refer to the report of said case, *East Ohio Gas* . v. *Public Utilities Commission*, 133 O. S. 212.

Notwithstanding that said Public Utilities Commission had theretofore held said 1933 Akron ordinance rate to be grossly unreasonable, the City of Akron proceeded, as alleged in its petition, on May 11, 1937, to pass a new ordinance effective for another four-year period, fixing precisely the same rate as that stricken down. East Ohio has likewise appealed from said last ordinance, elected to continue the former rate under bond and said appeal is now pending before the Public Utilities Commission of Ohio. Hope admits that East Ohio will include in operating expense and ask the Commission to allow the sums paid to Hope for the purchase of gas at the Ohio River under the Hope-East Ohio contract.

(b) Hope denies that a determination by this Honorable Commission of the fair rate for gas sold by Hope to East Ohio at the Ohio River will be of any assistance in the case of the City of Akron now pending before The Public Utilities Commission of Ohio, averring that said Commission is required to determine the fairness of said contract price as of approximately June 10, 1937, the effective date of said ordinance. Hope respectfully suggests that while this Honorable Commission is given the power to determine interstate rates prospectively, it is not given the power to determine whether the rate in effect on or about June 10, 1937 was or was not unreasonable or unlawful.

(c) Hope denies that a determination of a fair contract price between East Ohio and Hope by this Honorable Commission is essential to the determination of a fair and reasonable rate for natural gas in Akron either now or after the expiration of the present ordinance in June 1941. It avers that in repeated rate controversies between the Cities of Cleveland and Akron and East Ohio since 1921 the Ohio court or Public Utilities Commission hearing such controversy has in each instance imposed upon East Ohio the burden of proving that the prices at the time

paid to Hope and reflected in its operating expenses were fair and reasonable prices; that in connection with the trial of said cases the engineers, accountants and attorneys of the respective cities have had access to the properties, books, and records of Hope inofar as these were esential in determining Hope' costs; that the City of Cleveland had reports of its own engineers and accountants on Hope's properties and operations as of 1921, again as of 1928, again as of 1931, and again as of 1937, and that the City of Akron had access to the Cleveland reports and additionally had similar reports as of 1932. Because of the common ownership of the stock of Hope and East Ohio, The Public Utilities Commission of Ohio, the Cities of Cleveland and Akron and East Ohio have all assented to the position in rate controversies that the contract price between the two affiliated companies at the river is not even prima facie evidence of its fairness. All parties have introduced evidence as to, and the Commission itself has investigated, the value of the properties of Hope, its operations and its operating expenses in as complete detail as for East Ohio. Moreover, the Commission in former cases involving East Ohio rates has allowed as an operating expense to East Ohio the sums paid to Hope on account of gas delivered at the Ohio River only to the extent that it found them to be fair and reasonable. In view of the facts hereinabove stated Hope avers that the properties, records, and operations of East Ohio and Hope, and their relations, have been under almost continuous investigation by the Cities of Cleveland and Akron for the past ten years and by
6 The Public Utilities Commission of Ohio for the past seven years and denies that the exercise by this Commission of its jurisdiction as sought in the petition is necessary to enable either the City of Akron or said Commission to fix a fair rate for natural gas service in Akron or elsewhere.

7. Admits the allegations contained in paragraph Seventh of the petition.

## AMENDMENT TO COMPLAINT OF THE CITY OF CLEVELAND AGAINST HOPE NATURAL GAS COMPANY

Filed January 6, 1939—F. P. C. Docket No. G–100

1 The City of Cleveland, with leave of the Federal Power Commission first obtained, amends its petition and complaint herein by the addition of the following allegations, averments, and prayer:

First: Pursuant to the Natural Gas Act, Public No. 688, 75th Congress, Chapter 556, Third Session, approved June 21, 1938, and effective June 21, 1938, your Honorable Commission has authority to investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person has violated or is about to violate any provision of said Natural Gas Act. (Sec. 14 (a).)

Second: Pursuant to said Natural Gas Act, your Honorable Commission has authority to make available to state commissions and municipalities, information concerning any such matter. (Sec. 14 (a).)

Third: Pursuant to said Natural Gas Act, all rates and charges, made, demanded or received by any natural gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission must be just and reasonable and nondiscriminatory and any such rate or
2 charge that is not just and reasonable and nondiscriminatory is unlawful, and has been unlawful ever since the effective date of said Natural Gas Act on June 21, 1938. (Sec. 4 (a) and (b).)

Fourth: Pursuant to said Natural Gas Act, your Honorable Commission has authority to investigate and determine whether the charges made by Hope Natural Gas Company and payments received from The East Ohio Gas Company were unjust, unreasonable, unduly discriminatory and preferential and therefore contrary to Federal law, as of June 21, 1938, the effective date of the Natural Gas Act, and at all times subsequent thereto. (Natural Gas Act, Sec. 14 (a), (b).) (Sec. 4 (a).)

Fifth: Pursuant to said Natural Gas Act, your Honorable Commission upon its own motion, or upon the request of any state commission, whenever it can do so without prejudice to the efficient and proper conduct of its affairs, may investigate and determine the cost of the production and transportation of natural gas by a natural gas company in cases where the Commission has

no authority to establish a rate governing the transportation or sale of such natural gas. (Natural Gas Act, Sec. 5 (b).)

Sixth: The price charged by defendant Hope to East Ohio for natural gas was on June 21, 1938, and has been at all times since excessive, unjust, unreasonable, and discriminatory, at least in so far as said price has exceeded an average of 30 cents per M. c. f., and therefore was as of June 21, 1938, and has been at all times since, unlawful and contrary to the laws of the United States.

Seventh: A determination by your Honorable Commission in accordance with the prayer of this amendment should be of assistance in the cases of Cleveland and other Ohio municipalities now pending before The Public Utilities Commission of Ohio, in that the reasonableness of the ordinance rate in Cleveland for the two year period ending on or about June 30, 1939, is ultimately dependent upon the lawfulness of the charge made by Hope Natural Gas Company to The East Ohio Gas Company at the Ohio River; and the only body which can determine whether the price charged by Hope to East Ohio and received by Hope from East Ohio has been unlawful and contrary to the laws of the United States is your Honorable Commission (Natural
3 Gas Act, Sec. 1 (b)); and in the case of The East Ohio Gas Company v. Cleveland, now pending before The Public Utilities Commission of Ohio and known as Case No. 10202 on the docket of said commission, no allowance can be made in the operating expenses of The East Ohio Gas Company which is unlawful either for the buyer to pay, or for the seller to charge or receive.

Wherefore, the City of Cleveland prays that the order of investigation of the Federal Power Commission dated October 14, 1938, and docketed as No. G–113, be modified to include an investigation whether Hope Natural Gas Company has violated the Natural Gas Act by charging to and receiving from The East Ohio Gas Company an unreasonable, unjust, and discriminatory rate for natural gas delivered at the Ohio River on and since June 21, 1938, at least in so far as the average charge made by Hope Natural Gas Company and payment received from The East Ohio Gas Company has exceeded 30 cents per M. c. f.; further prays for a determination that the Natural Gas Act has been so violated by defendant Hope ever since June 21, 1938; and further prays that the information concerning such matter be made available to The Public Utilities Commission of Ohio and to the City of Cleveland.

## ANSWER OF HOPE NATURAL GAS COMPANY TO AMENDMENT TO COMPLAINT OF THE CITY OF CLEVELAND

Filed February 6, 1939—F. P. C. Docket No. G-100

1 Hope Natural Gas Company, hereinafter called "Hope," for its answer to the "Amendment to Petition and Complaint" filed herein by the City of Cleveland—

1. Admits that the Natural Gas Act was approved and became effective as set forth in paragraph First of said amendment and that said Act contains Sections 1 (b), 4 (a) and (b), 5 (b) and 14 (a) and (b) as set forth in paragraphs First, Second, Third, Fourth, Fifth and Seventh of said amendment, but denies that the statements of the terms and provisions of said Act and said sections thereof as set forth in said paragraphs are either accurate, correct or complete and refers to said Act and said sections thereof for an accurate, correct and complete statement of the law attempted to be summarized in said amendment.

2. (a) Denies the allegations of paragraph Sixth of said amendment in their entirety.

(b) As to the claim that the contract price charged for natural gas by Hope to The East Ohio Gas Company, hereinafter called "East Ohio," was on June 21, 1938 and at all times thereafter excessive, unjust, unreasonable and discriminatory, Hope avers that said price at said times did not and has not in any
2 recent years been sufficient to yield more than a fair return on the fair value of its properties devoted to that service; that since 1921 the price between Hope and East Ohio has repeatedly been investigated by the cities of Cleveland and Akron, Ohio, and by The Public Utilities Commission of Ohio, all of whom have made valuations of Hope's properties, audited its operating expenses and otherwise investigated its properties and operations; that said price was recently approved by said Commission for the years 1933 to 1937 *In re East Ohio Gas Company*, 17 P. U. R. (N. S.) 433; and that after further exhaustive hearings and a comprehensive investigation, including determinations of the value of Hope's properties as of June 30, 1937 and June 30, 1938, analyses of its operations, the ascertainment of its reasonable operating expenses and the fixing of a fair rate of return, said Commission on January 10, 1939 in the case of East Ohio's appeal from the City of Cleveland ordinance referred to in paragraph Seventh of said amendment, known as Cause No. 10,202 on the

docket of said Commission, found that said Hope-East Ohio price, as existing on June 21, 1938 and at all times since, was fair and reasonable and should properly be allowed in the operating expenses of East Ohio for the two-year period of said City of Cleveland ordinance ending June 30, 1939. The conclusion of said Commission hereon is set forth in its order of January 10, 1939 in said Cause No. 10,202, based on its findings and opinion of such date, as follow:

"That the fair and reasonable price to be paid by the East Ohio Ohio Gas Company to The Hope Natural Gas Company for gas supplied and furnished for distribution in the said City of Cleveland, Ohio, is the price of 38.5¢ per one thousand cubic feet, provided by the contract now existing by and between the said Companies, adjusted as provided in said contract for special industrial sales to average 36.15¢ and 36.82¢ per one thousand cubic feet for the years ended June 30, 1937, and June 30, 1938, respectively;".

3. (a) Denies the allegations of paragraph Seventh of said amendment in their entirety.

(b) As to the claim that a determination by this Honorable Commission in accordance with the prayer of said amendment will be of assistance in the case of the City of Cleveland pending before said Public Utilities Commission of Ohio, Hope avers that since the filing of said amendment said Commission on January 10, 1939 rendered its final decision and order in said case,

3 Cause No. 10,202, referred to in paragraph Seventh of said amendment and in the preceding paragraph 2 (b) of this answer. The inquiry and determination requested by the prayer of said amendment will be of no assistance to either the City of Cleveland or said Public Utilities Commission of Ohio in connection with said Cause No. 10,202.

## COMPLAINT OF PENNSYLVANIA PUBLIC UTILITY COMMISSION AGAINST HOPE NATURAL GAS COMPANY

Filed March 23, 1939—F. P. C. Docket No. G-127

1 Pennsylvania Public Utility Commission, complaining of the Hope Natural Gas Company, respectfully alleges for a first ground of complaint:

1. Pennsylvania Public Utility Commission, the Complainant here, is the regulatory body having jurisdiction to regulate rates and charges for the sale of natural gas to consumers within the Commonwealth of Pennsylvania, by virtue of Act No. 43, Pennsylvania Laws, 1937, and Act No. 286, Pennsylvania Laws, 1937 (as amended by Act No. 19, Extraordinary Session, Pennsylvania Laws, 1938), and is a "State Commission", within the meaning of Section II (8) of the Natural Gas Act.

2 2. The Defendant, Hope Natural Gas Company, is a corporation duly organized and existing under the laws of the State of West Virginia. Its principal office is located at 545 William Penn Way, Pittsburgh, in the Commonwealth of Pennsylvania, and it is a wholly owned subsidiary of the Standard Oil Company (New Jersey). Hope Natural Gas Company is engaged in the business of transporting and selling natural gas in interstate commerce, for resale, and is a "natural gas company" within the meaning of Section II (6) of the Natural Gas Act.

3. The Peoples Natural Gas Company is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, with its principal office at 545 William Penn Way, Pittsburgh, Pa. The Peoples Natural Gas Company is also a wholly owned subsidiary of the Standard Oil Company (New Jersey), and supplies gas at retail to approximately 124,000 consumers, in 12 counties in the Commonwealth of Pennsylvania.

4. Your Complainant, under its Complaint Docket No. 11380, Sub. No. 20, is conducting an inquiry and investigation for the purpose of determining the fairness and reasonableness of the rates and charges of The Peoples Natural Gas Company. According to its annual report for the year 1937 (the last available), The Peoples Natural Gas Company, under a contract effective May 8, 1937, purchased from Hope Natural Gas Company,

3 for resale to consumers in Pennsylvania, 3,506,013,000 cubic feet of natural gas, at a cost of $1,349,815.05. The price charged by Defendant, Hope Natural Gas Company, to The

Peoples Natural Gas Company was, and is at the present time, 38½c per thousand cubic feet, delivered to the Pennsylvania-West Virginia state line.

5. The sum paid by The Peoples Natural Gas Company to Defendant, Hope Natural Gas Company, in the year 1937, constituted approximately 17% of the total operating expenses of The Peoples Natural Gas Company for that year. The price charged by Defendant, Hope Natural Gas Company, to The Peoples Natural Gas Company for natural gas resold to consumers in Pennsylvania therefore directly affects the resale price to such consumers. In the proceeding instituted by the Pennsylvania Public Utility Commission against The Peoples Natural Gas Company, at Complaint Docket No. 11380, Sub. No. 20, referred to above, The Peoples Natural Gas Company seeks to include in its operating expenses the cost of natural gas purchased from the Defendant, Hope Natural Gas Company, at the price of 38½¢ per thousand cubic feet. A determination of the fair and reasonable rate at which gas should be sold by Hope Natural Gas Company to The Peoples Natural Gas Company is essential to a determination of the reasonableness of the rates charged by The Peoples Natural Gas Company to consumers in Pennsylvania.

6. On information and belief, it is alleged that the price of 38½¢ per thousand cubic feet charged by the Defendant, Hope Natural Gas Company is unlawful, excessive, unreasonable
4 and discriminatory in that:

(a) The sum charged The Peoples Natural Gas Company exceeds the reasonable cost of producing and transporting the gas, as described above, plus a reasonable and lawful return on the property invested for purposes of such production, transportation and sale;

(b) The sum charged The Peoples Natural Gas Company exceeds the price charged by Defendant to other companies operating in Pennsylvania, in territories similar to that of The Peoples Natural Gas Company, and under similar conditions of use and service, where such other operating companies are not affiliated with the Defendant or the Standard Oil Company (New Jersey).

7. All the natural gas sold by Defendant, Hope Natural Gas Company, to The Peoples Natural Gas Company is produced in West Virginia or states other than Pennsylvania, and transported directly in interstate commerce to the facilities of The Peoples

Natural Gas Company at the Pennsylvania-West Virginia state line. Your Honorable Commission is the only body which can determine whether the price charged by Hope Natural Gas Company to The Peoples Natural Gas Company for the natural gas so transported is just and reasonable, and whether the charge thus made was and is unlawful and contrary to the laws of the United States, as set forth in the Natural Gas Act, Section IV (a).

5 8. The Pennsylvania Public Utility Commission, Complainant, has available records relating to the production, transportation and sale of natural gas in Pennsylvania, and has also available a staff of accountants, engineers and other experts, all of which the Complainant hereby tenders and offers to the Federal Power Commission, for use in accordance with Section 17 (b) of the Natural Gas Act.

9. The filing of this petition has been authorized by a resolution adopted at the Executive Session of the Commission on January 16, 1939.

Wherefore, your Complainant prays that your Honorable Commission:

(a) Investigate the price charged by Defendant, Hope Natural Gas Company, to The Peoples Natural Gas Company for natural gas sold by the latter to the former, at the Pennsylvania-West Virginia state line, and fix the just, fair, and reasonable rate for the same.

(b) Make a determination that the Hope Natural Gas Company has, since June 21, 1938, violated the Natural Gas Act, Section IV (a).

(c) Make available to the Complainant, the Pennsylvania Public Utility Commission, the facts, records, and other relevant matters which your Honorable Commission may acquire in this proceeding.

6 Pennsylvania Public Utility Commission, complaining of the Hope Natural Gas Company, respectfully alleges for a second ground of complaint:

1. The allegations contained in paragraphs 1, 2, 8, and 9 of the first ground of complaint are hereby made a part of the second ground of complaint as fully as though the same were repeated.

2. Fayette County Gas Company is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, with its principal office at 800 Union Trust Building, Pittsburgh, Pennsylvania. The Fayette County Gas Company supplies gas at

retail to approximately 16,000 consumers in Fayette and Westmoreland Counties in the Commonwealth of Pennsylvania.

3. Your Complainant, under its Complaint Docket No. 11380, Sub. No. 97, is conducting an inquiry and investigation for the purpose of determining the fairness and reasonableness of the rates and charges of Fayette County Gas Company. According to its annual report for the year 1937 (the last available) Fayette County Gas Company purchased from Hope Natural Gas Company for resale to consumers in Pennsylvania, 849,305,000 cubic feet of natural gas at a cost of $267,536.10. The price charged by Defendant, Hope Natural Gas Company, to Fayette County Gas Company, was and is at the present time 31½¢ per thousand cubic feet, delivered at the Pennsylvania-West Virginia state line.

4. The sum paid by Fayette County Gas Company to Defendant, Hope Natural Gas Company, in the year 1937, constituted approximately 35% of the total operating expenses of Fayette County Gas Company for that year. The price charged by Defendant, Hope Natural Gas Company, to Fayette County Gas Company, for natural gas resold to consumers in Pennsylvania, therefore, directly affects the resale price to such consumers. In the proceeding instituted by the Pennsylvania Public Utility Commission against Fayette County Gas Company at Complaint Docket No. 11380, Sub. No. 97, referred to above, the Fayette County Gas Company seeks to include in its operating expenses the cost of natural gas purchased from the Defendant, Hope Natural Gas Company, at the price of 31½¢ per thousand cubic feet. A determination of the fair and reasonable rate at which gas should be sold by Hope Natural Gas Company to Fayette County Gas Company is essential to a determination of the reasonableness of the rates charged by Fayette County Gas Company, to consumers in Pennsylvania.

5. On information and belief it is alleged that the price of 31½¢ per thousand cubic feet charged by the Defendant, Hope Natural Gas Company is unlawful, excessive, and unreasonable, in that the sum charged the Fayette County Gas Company exceeds the reasonable cost of producing and transporting the gas, as described above, plus a reasonable and lawful return on the property invested for purposes of such production, transportation and sale.

6. All the natural gas sold by Defendant, Hope Natural Gas Company, to Fayette County Gas Company is produced in West

Virginia or states other than Pennsylvania, and transported directly in interstate commerce to the facilities of Fayette
8 County Gas Company at the Pennsylvania-West Virginia state line. Your Honorable Commission is the only body which can determine whether the price charged by Hope Natural Gas Company to Fayette County Gas Company for the natural gas so transported is just and reasonable, and whether the charge thus made was and is unlawful and contrary to the laws of the United States, as set forth in the Natural Gas Act, Section IV (a).

Wherefore, your Complainant prays that your Honorable Commission:

(a) Investigate the price charged by Defendant, Hope Natural Gas Company, to Fayette County Gas Company for natural gas sold by the latter to the former, at the Pennsylvania-West Virginia state line, and fix the just, fair, and reasonable rate for the same.

(b) Make a determination that the Hope Natural Gas Company has, since June 21, 1938, violated the Natural Gas Act, Section IV (a).

(c) Make available to the Complainant, the Pennsylvania Public Utility Commission, the facts, records, and other relevant matters which your Honorable Commission may acquire in this proceeding.

9 Pennsylvania Public Utility Commission, complaining of the Hope Natural Gas Company, respectfully alleges for a third ground of complaint:

1. The allegations contained in paragraphs 1, 2, 8, and 9 of the first ground of complaint are hereby made a part of the third ground of complaint as fully as though the same were repeated.

2. The Manufacturers Light and Heat Company is a corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, with its principal office at 800 Union Trust Building, Pittsburgh, Pennsylvania, and supplies gas at retail to approximately 113,000 consumers in the Commonwealth of Pennsylvania.

3. Your Complainant, under its Complaint Docket No. 11380, Sub. No. 18, is conducting an inquiry and investigation for the purpose of determining the fairness and reasonableness of the rates and charges of The Manufacturers Light and Heat Company. According to its annual report for the year 1937 (the last available) The Manufacturers Light and Heat Company purchased from Hope Natural Gas Company for resale to consumers in Pennsylvania 7,444,905,000 cubic feet of natural gas at a cost of $2,345,-

145.11. The price charged by Defendant, Hope Natural Gas Company, to The Manufacturers Light and Heat Company was, and is at the present time 31½¢ per thousand cubic feet, delivered at the Pennsylvania-West Virginia state line.

10 4. The sum paid by The Manufacturers Light and Heat Company to Defendant, Hope Natural Gas Company, in the year 1937, constituted approximately 23½% of the total operating expenses of The Manufacturers Light and Heat Company for that year. The price charged by Defendant, Hope Natural Gas Company, to The Manufacturers Light and Heat Company for natural gas resold to consumers in Pennsylvania, therefore, directly affects the resale price to such consumers. In the proceeding instituted by the Pennsylvania Public Utility Commission against The Manufacturers Light and Heat Company, at Complaint Docket No. 11380, Sub. No. 18, referred to above, The Manufacturers Light and Heat Company seeks to include in its operating expenses the cost of natural gas purchased from the Defendant, Hope Natural Gas Company, at the price of 33½¢ per thousand cubic feet. A determination of the fair and reasonable rate at which gas should be sold by Hope Natural Gas Company to The Manufacturers Light and Heat Company, is essential to a determination of the reasonableness of the rates charged by The Manufacturers Light and Heat Company to consumers in Pennsylvania.

5. On information and belief it is alleged that the price of 31½¢ per thousand cubic feet charged by the Defendant, Hope Natural Gas Company is unlawful, excessive, and unreasonable, in that the sum charged The Manufacturers Light and Heat Company exceeds the reasonable cost of producing and transporting the gas, as described above, plus a reasonable and lawful return on the property invested for purposes of such production, transportation, and sale.

11 6. All natural gas sold by Defendant, Hope Natural Gas Company, to The Manufacturers Light and Heat Company, is produced in West Virginia or states other than Pennsylvania, and transported directly in interstate commerce to the facilities of The Manufacturers Light and Heat Company at the Pennsylvania-West Virginia state line. Your Honorable Commission is the only body which can determine whether the price charged by Hope Natural Gas Company to The Manufacturers Light and Heat Company for the natural gas so transported is just and reasonable, and whether the charge thus made was and is unlawful

and contrary to the laws of the United States, as set forth in the Natural Gas Act, Section IV (a).

Wherefore, your Complainant prays that your Honorable Commission:

(a) Investigate the price charged by Defendant, Hope Natural Gas Co...pany, to The Manufacturers Light and Heat Company for natural gas sold by the latter to the former, at the Pennsylvania-West Virginia state line, and fix the just, fair, and reasonable rate for the same.

(b) Make a determination that the Hope Natural Gas Company has, since June 21, 1938, violated the Natural Gas Act, Section IV (a).

(c) Make available to the Complainant, the Pennsylvania Public Utility Commission, the facts, records, and other relevant matters which your Honorable Commission may acquire in this proceeding.

## ANSWER OF HOPE NATURAL GAS COMPANY TO COMPLAINT OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Filed April 25, 1939—F. P. C. Docket No. G–127

1 Defendant, Hope Natural Gas Company, for its answer to the several grounds of complaint set forth in the petition says:

As To The First Ground of Complaint

1. The defendant admits the allegations contained in paragraphs 1 and 2 thereof except the allegation that it is engaged in the business of transporting natural gas in interstate commerce, which it denies.

2. The defendant admits the allegations contained in paragraphs 3 and 4 thereof except it avers that the price of 38½¢ per thousand cubic feet for natural gas specified in the contract between the defendant and The Peoples Natural Gas Company contemplates that the defendant shall deliver gas sold to the Peoples Company at sufficient pressure to carry the gas to consumers' meters of the Peoples Company in its principal marketing area and provides that during the time that it is unable to do this and the Peoples Company finds it necessary to maintain a compressor station at or near the points of delivery, the Peoples Company shall be allowed the sum of 3¢ per thousand cubic feet in reduction of the purchase price. The defendant avers
2 that for some years past The Peoples Natural Gas Company has so maintained a compressor station, and that in settlements between it and the defendant for the gas sold the Peoples Company has been credited with 3¢ per thousand cubic feet against said purchase price of 38½¢.

3. As to paragraph 5 the defendant is without accurate knowledge of the matters therein alleged and for want thereof denies the same.

4. The defendant denies each and several the allegations contained in paragraph 6.

5. The defendant admits the allegations contained in paragraph 7 except the allegations that the natural gas sold by defendant to The Peoples Natural Gas Company is "transported directly in interstate commerce" and that the price charged by defendant to The Peoples Natural Gas Company is for the transportation of natural gas, which it denies.

6. As to paragraphs 8 and 9 the defendant is without knowledge of the matters therein alleged and for want thereof denies the same.

As To The Second Ground of Complaint.

1. The defendant, for its answer to paragraph 1, refers to the admissions and denials contained in the foregoing answer in response to paragraphs 1, 2, 8, and 9 of the First Ground of Complaint and begs leave to incorporate herein as though repeated the answers thereto heretofore made.

2. As to paragraph 2 the defendant is without accurate knowledge of the matters therein alleged and for want thereof denies the same and states that defendant's understanding is that Fayette County Gas Company is a corporation organized and existing under the laws of the State of West Virginia.

3. The defendant admits that the price charged by it to Fayette County Gas Company is and for some time past has been 31½¢ per thousand cubic feet for natural gas delivered at the West Virginia-Pennsylvania state line and that during the year 1937 it sold to Fayette County Gas Company 849,305,000 cubic feet of natural gas for a consideration of $267,531.10, and for want of information denies each and several the other allegations contained in paragraph 3.

3 4. For want of information the defendant denies each and several the allegations contained in paragraph 4.

5. The defendant denies each and several the allegations contained in paragraph 5.

6. The defendant admits the allegations contained in paragraph 6 except the allegations that all the natural gas sold by defendant to Fayette County Gas Company is "transported directly in interstate commerce" and that the price charged by defendant to Fayette County Gas Company is for the transportation of natural gas, which it denies.

As To The Third Ground of Complaint

1. The defendant, for its answer to paragraph 1, refers to the admissions and denials contained in the foregoing answer in response to paragraphs 1, 2, 8 and 9 of the First Ground of Complaint and begs leave to incorporate herein as though repeated the answers thereto heretofore made.

2. As to paragraph 2 the defendant is without accurate knowledge of the matters therein alleged and for want thereof denies the same.

3. The defendant admits that the price charged by it to The Manufacturers Light and Heat Company is and for some time past has been 31½¢ per thousand cubic feet and that during the year 1937 it sold to The Manufacturers Light and Heat Company 7,444,905,000 cubic feet of natural gas for a consideration of $2,345,145.11, denies that said price is for natural gas delivered at the Pennsylvania-West Virginia state line and avers that said deliveries are at Bates Measuring Station near Sedalia, Doddridge County, West Virginia. For want of information the defendant denies each and several the other allegations contained in paragraph 3.

4. For want of information the defendant denies each and several the allegations contained in paragraph 4.

5. The defendant denies each and several the allegations contained in paragraph 5.

6. The defendant admits the allegations contained in paragraph 6 except the allegations that all the natural gas sold by
4 defendant to The Manufacturers Light and Heat Company is "transported directly in interstate commerce" and that the price charged by defendant to The Manufacturers Light and Heat Company is for the transportation of natural gas, which it denies.

1 United States of America

Federal Power Commission

Commissioners: Clyde L. Seavey, Acting Chairman, Claude L. Draper, Basil Manly, John W. Scott.

October 14, 1938.

In re Hope Natural Gas Company

Docket No. G-113.

## ORDER INSTITUTING INVESTIGATION

It appearing to the Commission that:

(a) The Hope Natural Gas Company, a corporation organized and existing under the laws of the State of West Virginia, owns and operates gas wells, field and gathering lines, and distribution facilities, located in the State of West Virginia, and transmission pipe lines extending from points in the State of West Virginia to the West Virginia-Ohio state line and to the West-Virginia-Pennsylvania state line;

(b) The Hope Natural Gas Company is engaged in the transportation of natural gas in interstate commerce and the sale of interstate commerce of naural gas for resale for ulimate public consumption for domestic, commercial, industrial, or other use, and is a natural-gas company within the meaning of the Natural Gas Act;

(c) Pursuant to Section 4 (c) of the Natural Gas Act and the Commission's Order No. 53, the Hope Natural Gas Company, on September 3, 1938, filed with the Commission its contracts and agreements covering the sale of natural gas to the East Ohio Gas Company, the Peoples Natural Gas Company, the Manufacturers Light and Heat Company, the Fayette County Gas Company, and the River Gas Company;

(d) In Docket No. G-100, on July 6, 1938, the City of Cleveland, Ohio, and in Docket No. G-101, on July 25, 1938, the City of Akron, Ohio, filed complaints with the Commission against the Hope Natural Gas Company, alleging that the price charged by the Hope Natural Gas Company to the East Ohio Gas Company, an affiliated company, for natural gas sold and delivered at the Ohio River for resale to domestic, commercial and small in-

dustrial consumers in the cities of Cleveland and Akron and elsewhere, is excessive, unjust, unreasonable, greatly in excess of the price charged by the Hope Natural Gas Company to nonaffiliated companies at wholesale for resale to domestic, commercial, and small industrial consumers, and greatly in excess of the price charged by Hope Natural Gas Company to the East Ohio Gas Company for resale to certain favored industrial consumers in Ohio and therefore unduly discriminatory between customers and between classes of service. Said complaints pray for an investigation by this Commission and a finding that the price charged the East Ohio Gas Company by the Hope Natural Gas Company for gas sold and delivered at the Ohio River is excessive, unreasonable, and unjustly discriminatory, and for the fixing of a just, fair and reasonable rate.

(e) The Hope Natural Gas Company, on August 18, 1938, and August 26, 1938, filed its answers to the complaints of the City of Cleveland and the City of Akron, respectively, in which it denies that the price charged by the Hope Natural Gas Company to the East Ohio Gas Company for natural gas for resale to domestic, commercial, and small industrial consumers is excessive, unreasonable or discriminatory;

(f) The Hope Natural Gas Company purchases substantial quantities of the natural gas which it transports, sells and delivers to the East Ohio Gas Company from the Clayco Gas Company, a corporation organized and existing under the laws of the State of West Virginia, and the South Penn Oil Company, a corporation organized and existing under the laws of the State of Pennsylvania, pursuant to the terms and conditions of contracts which were filed with the Commission by the Clayco Gas Company and the South Penn Oil Company on September 3, 1938, in compliance with Section 4 (c) of the Natural Gas Act and the Commission's Order No. 53;

Wherefore, the Commission finds that:

It is necessary and proper, in the public interest, and to aid in the enforcement of the provisions of the Natural Gas Act, that an investigation be instituted by the Commission, on its own motion, into and concerning all rates, charges, classifications, rules, regulations, practices or contracts of the Hope Natural Gas Company, and into and concerning the contracts, agreements and arrangements pursuant to which the Hope Natural Gas Company purchases natural gas;

The Commission, on its own motion, orders that:

(A) An investigation of the Hope Natural Gas Company be and is hereby instituted, for the purpose of enabling the Commission: (1) To determine with respect to said company, whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rate, charge, or classification demanded, observed, charged or collected or any rule, regulation, practice, or contract affecting such rate, charge, or classification, is unjust, unreasonable, unduly discriminatory, or preferential; and (2) if the Commission shall find that any such rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders just, reasonable, and nondiscriminatory rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force;

(B) Said investigation shall include an inquiry into and the determination of the reasonableness and lawfulness of the purchase prices paid by the Hope Natural Gas Company for natural gas, including the prices paid to the Clayco Gas Company and the South Penn Oil Company.

By the Commission.

LEON M. FUQUAY, *Secretary.*

1 United States of America

Federal Power Commission

Commissioners: Clyde L. Seavey, Acting Chairman; Claude L. Draper, John W. Scott. Basil Manly, not participating.

JUNE 6, 1939.

In the Matter of Hope Natural Gas Company

Docket No. G-113

## ORDER DISMISSING PETITION AND SUPPLEMENT THERETO REQUESTING MODIFICATION OF ORDER INSTITUTING INVESTIGATION

It appearing to the Commission that:

(a) On October 14, 1938, the Commission on its own motion, adopted an order instituting an investigation of the Hope Natural Gas Company for the purpose of enabling the Commission (1) to determine, with respect to said company, whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rate, charge, or classification demanded, observed, charged, or collected or any rule, regulation, practice, or contract affecting such rate, charge, or classification, is unjust, unreasonable, unduly discriminatory, or preferential; and (2) if the Commission shall find that any such rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders just, reasonable and nondiscriminatory rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force;

(b) On January 9, 1939, the City of Cleveland, Ohio, filed with the Commission a petition praying that the Commission modify its order of October 14, 1938, to include an investigation whether Hope Natural Gas Company has violated the Natural Gas Act by charging to the receiving from The East Ohio Gas Company an unreasonable, unjust and discriminatory rate for natural gas delivered at the Ohio River on and since June 21, 1938, the effective date of the Natural Gas Act, at least insofar as the average charge made by Hope Natural Gas Company and payment re-

ceived from The East Ohio Gas Company has exceeded 30 cents per m. c. f.; said petition prays for a determination by the Commission that the Natural Gas Act has been so violated by Hope Natural Gas Company ever since June 21, 1938, and prays that the information concerning such matter be made available to The Public Utilities Commission of Ohio and to the City of Cleveland;

(c) On February 6, 1939, the Hope Natural Gas Company filed with the Commission its answer to said petition of the City of Cleveland, denying that the contract price charged for natural gas to The East Ohio Gas Company was on June 21, 1938, and at all times thereafter excessive, unjust, unreasonable, and discriminatory, and calling attention to proceedings before The
2 Public Utilities Commission of Ohio approving said contract price; said answer avers that the inquiry and determination requested in the petition filed by the City of Cleveland will be of no assistance either to the City of Cleveland or to The Public Utilities Commission of Ohio;

(d) On March 10, 1939, the City of Cleveland filed a supplement to its petition for a modification of the order of the Commission of October 14, 1938, reciting in said supplement that The Public Utilities Commission of Ohio has entered an order in the proceeding pending before it, that the decision of The Public Utilities Commission has been appealed to the Supreme Court of Ohio, and averring that an investigation and determination as prayed for in the petition should be of assistance to the City of Cleveland in the Supreme Court of Ohio and to the City of Cleveland and The Public Utilities Commission of Ohio on remand of the orders of said Public Utilities Commission of Ohio;

(e) On April 8, 1939, the Hope Natural Gas Company filed with the Commission its answer to said supplement to the petition of the City of Cleveland, alleging that the investigation and determination prayed for in the petition of the City of Cleveland will not be of any assistance to the City of Cleveland in the Supreme Court of Ohio;

It further appearing to the Commission that:

(f) The investigation of the Hope Natural Gas Company now in progress in this proceeding will include the compilation of information and data which will be relevant to the determination of just, reasonable, and nondiscriminatory rates and charges since the effective date of the Natural Gas Act, and

The Commission, having considered the said petition and supplement thereto of the City of Cleveland and the answers thereto of the Hope Natural Gas Company, finds that:

It will not be necessary to a full exercise of the power and authority of this Commission that said order of investigation, adopted herein on October 14, 1938, be amended or modified as requested by the City of Cleveland;

The Commission orders that:

The petition of the City of Cleveland, filed on January 9, 1939, praying for a modification of the order of the Commission of October 14, 1938, and the supplement to said petition, filed on March 10, 1939, be and they are hereby dismissed.

By the Commission.

LEON M. FUQUAY, *Secretary.*

1 United States of America

Federal Power Commission

Commissioners: Clyde L. Seavey, Chairman; Claude L. Draper, Basil Manly, Leland Olds, John W. Scott.

October 3, 1939.

City of Cleveland, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–100

City of Akron, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–101

In the Matter of Hope Natural Gas Company

Docket No. G–113

Pennsylvania Public Utility Commission, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–127

## ORDER FIXING DATE OF HEARING

It appearing to the Commission that:

(a) In Docket No. G–100, on July 6, 1938, the City of Cleveland, Ohio; and in Docket No. G–101, on July 25, 1938, the City of Akron, Ohio, filed complaints with the Commission against the Hope Natural Gas Company, alleging that the price charged by the Hope Natural Gas Company to The East Ohio Gas Company, an affiliated company, for natural gas sold and delivered at the Ohio River for resale to domestic, commercial, and small industrial consumers in the cities of Cleveland and Akron and elsewhere, is excessive, unjust, unreasonable, greatly in excess of the price

charged by the Hope Natural Gas Company to nonaffiliated companies at wholesale for resale to domestic, commercial, and small industrial consumers, and greatly in excess of the price charged by Hope Natural Gas Company to The East Ohio Gas Company for resale to certain favored industrial consumers in Ohio and therefore unduly discriminatory between customers and between classes of service. Said complaints prayed for an investigation by this Commission and a finding that the price charged The Eat Ohio Gas Company by the Hope Natural Gas Company for gas sold and delivered at the Ohio River is excessive, unreasonable, and unjustly discriminatory, and for the fixing of a just, fair, and reasonable rate;

(b) On August 18, 1938, and August 26, 1938, the Hope Natural Gas Company filed its answers to the complaints of the City of Cleveland and the City of Akron in Docket No. G-100 and Docket No. G-101, respectively, in which it denied that the price charged by the Hope Natural Gas Company to The East Ohio Gas Company for natural gas for resale to domestic, commercial, and small industrial consumers is excessive, unreasonable, or discriminatory;

(c) In Docket No. G-113, on October 14, 1938, the Commission, on its own motion, adopted an order instituting an investigation of the Hope Natural Gas Company for the purpose of enabling the Commission (1) to determine, with respect to said company, whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rate, charge, or classification demanded, observed, charged, or collected or any rule, regulation, practice or contract affecting such rate, charge, or classification, is unjust, unreasonable, unduly discriminatory, or preferential; and (2) if the Commission shall find that any such rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders just, reasonable and nondiscriminatory rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force;

(d) Said order instituting an investigation was duly served upon the Hope Natural Gas Company and was received by said company on October 15, 1938;

(e) In Docket No. G-127, on March 23, 1939, the Pennsylvania Public Utility Commission filed a complaint with the Commission against the Hope Natural Gas Company, alleging that the prices charged by the Hope Natural Gas Company to The Peoples

Natural Gas Company, the Fayette County Gas Company, and The Manufacturers Light and Heat Company, for natural gas sold and delivered at points on the Pennsylvania-West Virginia state line for resale in the State of Pennsylvania, are unlawful, excessive, unreasonable, and discriminatory, and said complaint prays for an investigation by this Commission of said prices and for the fixing of just, fair, and reasonable rates;

(f) On April 25, 1939, the Hope Natural Gas Company filed its answer to the complaint of the Pennsylvania Public Utility Commission in Docket No. G–127, in which it denied that the prices charged by the Hope Natural Gas Company to The Peoples Natural Gas Company, the Fayette County Gas Company, and The Manufacturers Light and Heat Company are unlawful, excessive, unreasonable, and discriminatory;

(g) Hope Natural Gas Company has in course of preparation a restatement of the cost of its property and plant and representatives of the Commission have been informed that such restatement studies are substantially completed and will be entirely completed within a comparatively short time;

The Commission *orders* that:

(A) A public hearing in these proceedings be held commencing on December 4, 1939, at ten o'clock a. m., in the Hearing Room of the Federal Power Commission, Hurley-Wright Building, 1800 Pennsylvania Avenue, N. W., Washington, D. C., and at said public hearing, pursuant to the provisions of Sec. 50.63 of the Provisional Rules of Practice and Regulations Under the Natural Gas Act, the order of procedure will be for the Hope Natural Gas Company to open and close these proceedings with the presentation of its evidence relevant and material to the question whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rate, charge, or classification demanded, observed, charged, or collected by said Hope Natural Gas Company, or any rule, regulation, practice or contract affecting such rate, charge, or classification, is unjust, unreasonable, unduly discriminatory or preferential;

(B) Docket Nos. G–100, G–101, G–113, and G–127 be and they are hereby consolidated for purposes of hearing thereon;

(C) Hope Natural Gas Company is hereby requested to submit at said hearing the restatement of the cost of its property and plant mentioned in paragraph (g) of this order.

By the Commission.

LEON M. FUQUAY, *Secretary.*

## STATEMENT OF COMPANY COUNSEL ON ORDER OF PROOF

Transcript pages 26–28

* * *

26 Mr. COCKLEY. There is one preliminary matter, if the Examiner please, and that has to do with the question raised by the Commission's order of October 3, 1939, which consolidated all of these complaints with an investigation by the Commission on its own motion, and directed, in accordance with the Provisional Rules of the Commission under the Natural Gas Act, and I am quoting this:

"That the order of procedure will be for the Hope Natural Gas Company to open and close these proceedings with the presentation of its evidence."

The Natural Gas Act, of course, does not place the burden of proof in a technical sense upon the company unless the com-
27 pany is asking for an increase of rates or a change of rates, or is asking for some other relief. The Hope Company in this case has not as yet, at least, made any application for an increase of rates. It has not petitioned for any relief. Complaints have been filed against it by the cities of Cleveland and Akron, and by the Pennsylvania Commission, charging in the most general terms that their rates are unreasonable and discriminatory. Those complaints do not advise the Hope Company in any respect in which it is claimed that the rates are unreasonable and discriminatory—just a general charge.

Now, we are not disposed to quarrel with the order of the Commission designating that we go forward first, although it seems to us a little unusual to require the defendant company to come in and present evidence to refute charges that have not yet been substantiated or have not even been specified with sufficient definiteness that any one can tell what the charges are. We assume that the Commission in making that order is doing it pursuant to a discretion that it has to conduct its own investigation in any way that it sees fit, and if it wants to conduct its investigation by designating the order of proof, without changing the burden of proof in any respect, we see no objection and will be glad to cooperate with that method of procedure, but we do want to have it noted that the Hope Company itself is not thereby, by going forward
28 in the first instance, is not thereby assuming any burden of proof, because it does not lie upon the Hope Company under

the Act, but that it is reserving all of its rights under the Act and under the law as it has been interpreted by the courts many times that the burden of proof is always upon the man who makes the charge and not upon the man who is defending it. With that reservation, we are willing to proceed in accordance with the orders of the Commission.

* * *

1 United States of America

Federal Power Commission

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

October 1, 1940.

City of Cleveland, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–100

City of Akron, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–101

In the Matter of Hope Natural Gas Company

Docket No. G–113

Pennsylvania Public Utility Commission, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–127

## ORDER FIXING DATE FOR HEARING ON MOTION FOR AN IMMEDIATE ORDER REDUCING RATES

It appearing to the Commission that:

(a) On July 6, 1938, a complaint was filed by the City of Cleveland against the rate charged by defendant Hope Natural Gas Company to its affiliate, The East Ohio Gas Company, for gas produced in the State of West Virginia and delivered at the Ohio River for transportation to and resale in Cleveland, and it prayed for an investigation by the Federal Power Commission, a finding that said River Rate is excessive, unreasonable, and unjustly discriminatory, and for the fixing of a just, fair, and reasonable rate;

(b) On July 25, 1938, a complaint was filed by the City of Akron against Hope Natural Gas Company, alleging that the price charged by the Hope Natural Gas Company to The East

Ohio Gas Company, an affiliated company, for natural gas sold and delivered at the Ohio River for resale to domestic, commercial and industrial consumers in the City of Akron and elsewhere, is excessive, unjust, unreasonable, greatly in excess of the price charged by the Hope Natural Gas Company nonaffiliated companies at wholesale for resale to domestic, commercial and industrial consumers, and greatly in excess of the price charged by Hope Natural Gas Company to The East Ohio Gas Company for resale to certain favored industrial consumers in Ohio and therefore unduly discriminatory between customers and between classes of service;

(c) On August 18, 1938 and August 26, 1938, the Hope Natural Gas Company filed its answers to the complaints of the City of Cleveland and the City of Akron, respectively, in which it denied that the price charged by the Hope Natural Gas Company to The East Ohio Gas Company for natural gas for resale to domestic, commercial, and industrial consumers is excessive, unreasonable, or discriminatory;

(d) On October 14, 1938, this Commission, on its own motion, ordered an investigation of the Hope Natural Gas Company for the purpose of enabling the commission:

"(1) To determine with respect to said company, whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rate, charge, or classification demanded, observed, charged or collected or any rule, regulation, practice, or contract affecting such rate, charge, or classification, is unjust, unreasonable, unduly discriminatory, or preferential; and (2) if the Commission shall find that any such rate, charge classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders just, reasonable, and nondiscriminatory rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force;

"Said investigation shall include an inquiry into and the determination of the reasonableness and lawfulness of the purchase prices paid by the Hope Natural Gas Company for natural gas, including the prices paid to the Clayco Gas Company and the South Penn Oil Company."

(e) On March 23, 1939, the Pennsylvania Public Utility Commission filed a complaint with the Commission against the Hope Natural Gas Company, alleging that the prices charged by the

Hope Natural Gas Company to The Peoples Natural Gas Company, Fayette County Gas Company, and the Manufacturers
3 Light and Heat Company, for natural gas sold and delivered at points on the Pennsylvania-West Virginia State line for resale in the State of Pennsylvania, are unlawful, excessive, unreasonable, and discriminatory, and prayed for an investigation by this Commission of said prices and for the fixing of just, fair, and reasonable rates, and that on April 25, 1939, the Hope Natural Gas Company filed its answer to the complaint of the Pennsylvania Public Utility Commission;

(f) On October 3, 1939, the Commission entered an order consolidating Docket Nos. G–100, G–101, G–113, and G–127 for hearing and fixed the date for the first hearing which was subsequently postponed to April 1, 1940, upon the request of Counsel for the Hope Natural Gas Company;

(g) Since April 1, 1940, hearings have been held from time to time in Clarksburg, West Virginia, and at those hearings the defendant-respondent company has appeared by counsel, has had full opportunity to be heard, has offered and presented both oral and documentary evidence, has been subjected to cross-examination, has engaged in redirect examination, and has presented all the evidence relating to the issues herein which it chose to present in opening the proceedings as directed by the Commission's order of October 3, 1939;

(h) On April 2, 1940, the Commission granted petitions to intervene filed by the Public Service Commission of West Virginia and the State of West Virginia;

(i) On September 23, 1940, Counsel for the Cities of Cleveland and Akron, Ohio, filed a "Motion for an Immediate Order Reducing Rates", which had a certificate attached showing service by mail upon all parties;

(j) In the motion it is moved "that the Commission enter an immediate order for a Hope-East Ohio rate reduction of approximately $662,000 per year, and that the Commission fix just and reasonable rates for gas sold by Hope Natural Gas Company to The East Ohio Gas Company for natural gas delivered at the Ohio River for resale to consumers in Cleveland, Akron, and elsewhere effecting said reduction upon the Hope company's own testimony herein, without prejudice to the power and authority of the Commission to find said reduced rates excessive upon the testimony of the Commission's staff to be hereafter offered in evidence, and without prejudice to the power and authority

of the Commission to further reduce said River Rates upon its own motion or otherwise at any time hereafter, upon good cause shown; and that the Commission proceed immediately to fix by order dates for briefs and oral argument upon this motion.";

4. (k) The specific allegations or grounds for said motion are more fully set out therein and the same are hereby incorporated herein and made a part hereof;

The Commission, therefore, orders that:

(A) The "Motion for an Immediate Order Reducing Rates" be and it is hereby set down for hearing before the Commission, *en banc*, on November 20, 1940, at 10:00 a. m., in the hearing room of the Federal Power Commission, 1800 Pennsylvania Avenue, N. W., Washington, D. C., at which time counsel for the respective parties may present oral argument;

(B) Main briefs in support of or in opposition to said motion shall be filed on or before November 1, 1940; reply briefs shall be filed within ten days after November 1, 1940.

By the Commission.

LEON M. FUQUAY, *Secretary.*

1 United States of America

Federal Power Commission

Commissioners: Leland Olds, chairman; Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

DECEMBER 20, 1940.

CITY OF CLEVELAND, COMPLAINANT

*v.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G-100

CITY OF AKRON, COMPLAINANT

*v.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G-101

In the Matter of HOPE NATURAL GAS COMPANY

Docket No. G-113

PENNSYLVANIA PUBLIC UTILITY COMMISSION, COMPLAINANT

*v.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G-127

## ORDER DENYING MOTION FOR AN IMMEDIATE ORDER REDUCING RATES

Upon consideration of the joint "Motion for an Immediate Order Reducing Rates" for natural gas sold at wholesale by Hope Natural Gas Company to the East Ohio Gas Company, filed by the Cities of Cleveland and Akron, Ohio, on September 23, 1940; the main and reply briefs in support of the joint Motion filed by the Cities; the main and reply briefs and exceptions to the Cities' proposed findings filed in opposition by Hope Natural

Gas Company; the exceptions, objections and joint motions of the State of West Virginia and the Public Service Commission of West Virginia filed on November 20, 1940, with respect to the Cities' Motion; the oral arguments on the Cities' Motion presented to the Commission sitting en banc on November 20, 1940, by counsel on behalf of the Cities, the Company, the State of West Virginia and the Public Service Commission of West Virginia and the entire evidence adduced of record in the above-entitled proceedings;

The Commission finds that:

There is insufficient evidence of record, at this time, to support the prayer for relief requested by the movants;

The Commission orders that:

(A) The joint motion of the Cities of Cleveland and Akron, Ohio, for an immediate order reducing rates for natural gas sold at wholesale by the Hope Natural Gas Company to the East Ohio Gas Company be and it is hereby denied without prejudice;

(B) This order is not to be construed as a determination of any of the issues in the pending principal proceedings involving the reasonableness of the interstate wholesale rates of the Hope Natural Gas Company, but is confined to the merits of the present joint motion filed by the Cities of Cleveland and Akron, Ohio.

By the Commission.

LEON M. FUQUAY, *Secretary.*

2180 **STATEMENT OF COMMISSION COUNSEL ON THE ISSUES**

Transcript pages 2180-2182

Mr. STRINGER. Mr. Examiner, I should like to make an opening statement at this time.

In order that there will be no doubt about the issues in this rate case, I should like to outline what will be shown by the facts, which the Commission's staff will present beginning today.

Considering the rate base first—we will present evidence which will show that the Hope Natural Gas Company's prudent investment or adjusted book cost, in other than distribution property and before allocation, as of December 31, 1938, is approximately $51,200,000. Hope Natural Gas Company's book reserve for depreciation and depletion, excluding specific distribution system reserves, totaling $39,320,000, appears to be excessive as a measure of the accrued depreciation and depletion in the Company's property, so we will present evidence, based upon the straight-line and production depreciation methods, to show that the depreciation and depletion reserve requirement relating to the above property is about $23,500,000, and that this is the best measure of the accrued depreciation and depletion in the property. It may be noted that the excess of the Company's book reserve over the reserve requirement is about $15,800,000, which might be considered capital contributions made by consumers in the past and the total book reserve might be deducted equitably in determining the rate base.

2181 We have exposed the fundamental defects in the Hope Natural Gas Company's trended original cost, its estimated reproduction cost new, and its claimed "observed-accrued" depreciation by cross-examination, but we may elect to present concise rebuttal evidence on these three subjects in addition.

The Company's misnamed, but claimed "original cost" contains about $17,000,000 which the Company did not choose to capitalize in the past by election of the management, but which it now attempts to capitalize retroactively. We disagree on principle with this attempt to place multiple charges on the consumers and we will recommend to the Commission that the rate base in this case be predicated upon the only reliable evidence which the record will contain, that is, the Company's prudent investment or adjusted book cost of approximately $51,200,000, in other than distribution property and before allocation, less the depreciation and depletion

reserve requirement of approximately $23,500,000, plus working capital of about $2,000,000, which produces a depreciated rate base of about $29,700,000 for the end of 1938. Of course, we will present evidence to bring all these figures up to date.

We will present the facts which will enable the Commission to determine: (1) Whether the Company's gas reserves are adequate;

(2) whether the Company pays a reasonable price for the
2182 great quantity of gas which it purchases; and (3) whether Hope Natural Gas Company receives a fair price for the gasoline extracted from its gas by its affiliate, Hope Construction and Refining Company. Until the Company presents more convincing proof of the portion of its investment in its 600,000 unoperated acres which is devoted to its gas service and is useful in the reasonably near future, we will recommend that the entire amount be excluded from the rate base and that the related delay rentals be excluded from the allowable operating expenses. We will also present appropriate evidence showing the revenues, expenses and resulting operating income of the Hope Natural Gas Company.

We will present facts relevant to the rate of return which is fair and reasonable for the Hope Natural Gas Company.

We intend to present evidence to show the segregation of the Company's revenues, operating expenses, depreciation, depletion and return as between its intrastate and interstate business.

Considering Hope's operating income and applying a reasonable rate of return to the recommended depreciated prudent investment rate base, there is indicated a substantial reduction in the interstate wholesale rates of the Hope Natural Gas Company.

1 United States of America

Federal Power Commission

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

October 3, 1941.

City of Cleveland, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–100

City of Akron, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–101

In the Matter of Hope Natural Gas Company

Docket No. G–113

Pennsylvania Public Utility Commission, complainant

*v.*

Hope Natural Gas Company, defendant

Docket No. G–127

## ORDER (1) DENYING APPLICATION FOR SERVICE OF TRIAL EXAMINER'S REPORT AND (2) GRANTING ORAL ARGUMENT

Upon application of Hope Natural Gas Company, filed September 30, 1941, requesting, as separate application, (1) that any trial examiner's report in this proceeding be served upon it, and (2) that it be granted oral argument before the Commission en banc;

It appearing to the Commission that:

(a) Section 19 (a) of the Natural Gas Act provides in part as follows:

Any person, State, municipality, or State commission aggrieved by an order issued by the Commission in a proceeding under
2 this Act to which such person, State, municipality, or State commission is a party may apply for a rehearing within thirty days after the issuance of such order. The application for rehearing shall set forth specifically th ground or grounds upon which such application is based. Upon such application the Commission shall have power to grant or deny rehearing or to abrogate or modify its order without further hearing * * *;

(b) Under this provision of the Act any aggrieved party, in its application for rehearing, may take exception to any or all findings of the Commission, its failure to make necessary findings, or any order or conclusions embodied in the opinion or order of the Commission;

(c) Such statutory procedure provides a direct and adequate means of excepting to any part of the Commission's order by which a party deems himself aggrieved and avoids the cumbersome and frequently futile procedure of taking exceptions to the merely advisory findings and conclusions of the examiner, many of which may not be accepted by the Commission or be incorporated in the Commission's order.

Wherefore, the Commission orders that:

(A) Applicant's request for service upon it of any trial examiner's report which may be made herein be and the same is hereby denied;

(B) Oral argument on the issues raised at the hearing herein be had before the Commission, en banc, on October 27, 1941, at 9:45 a. m., in the Hearing Room of the Commission, 1800 Pennsylvania Avenue NW., Washington, D. C.

By the Commission.

LEON M. FUQUAY, *Secretary.*

United States of America

Federal Power Commission

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly, John W. Scott and Clyde L. Seavey.

NOVEMBER 4, 1941.

CITY OF CLEVELAND, COMPLAINANT

*v.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G–100

CITY OF AKRON, COMPLAINANT

*v.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G–101

In the Matter of HOPE NATURAL GAS COMPANY,
Docket No. G–113

PENNSYLVANIA PUBLIC UTILITY COMMISSION, COMPLAINANT

*v.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G–127

## ORDER DENYING APPLICATION FOR REHEARING

Upon consideration of the application filed on October 23, 1941, by Hope Natural Gas Company requesting reconsideration and rehearing with respect to the Commission's order of October 3, 1941, which denied the application for service of the Trial Examiner's Report, but granted oral argument;

The Commission finds that:

Hope Natural Gas Company has been fairly and fully advised of the legal and factual issues in these proceedings; it has had full opportunity to test, explain or refute the evidence of record and to meet the legal and factual issues involved, both by brief and oral argument before the entire Commission; and will have available,

to it the procedure recited in paragraphs (a), (b), and (c) of the Commission's order of October 3, 1941;

Wherefore, the Commission orders that:

Applicant's request for a rehearing with respect to the Commission's order of October 3, 1941, be and it is hereby denied.

By the Commission.

LEON M. FUQUAY, *Secretary.*

1 United States of America

Federal Power Commission

Commissioners: Leland Olds, Chairman, Claude L. Draper, Basil Manly, and Clyde L. Seavey.

JULY 7, 1942.

CITY OF CLEVELAND, COMPLAINANT

*vs.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G–100

CITY OF AKRON, COMPLAINANT

*vs.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G–101

PENNSYLVANIA PUBLIC UTILITY COMMISSION, COMPLAINANT

*vs.*

HOPE NATURAL GAS COMPANY, DEFENDANT

Docket No. G–127

In the Matter of HOPE NATURAL GAS COMPANY,

Docket No. G–113

## ORDER DENYING PETITION FOR REHEARING AND STAY

Upon consideration of the petition of Hope Natural Gas Company filed June 24, 1942, for rehearing and stay with respect to the Commission's findings as to lawfulness of past rates and order reducing rates of that Company entered on May 26, 1942, and the Commission's Opinion No. 76; and upon further consideration of all previous orders in these proceedings, the evidence of record, the briefs and oral arguments, and adhering to its Opinion No. 76, findings as to lawfulness of past rates and order of May 26, 1942, reducing rates;

The Commission finds that:

No new facts have been presented or alleged in the petition for rehearing which would justify a reversal or revision of the Commission's Opinion No. 76, findings as to lawfulness of past rates and order reducing rates, entered May 26, 1942, and no principles

of law are stated in the petition for rehearing and stay which were not fully considered by the Commission before it rendered said opinion, findings and order;

The Commission, therefore, orders that:

The petition for rehearing and stay be and it is hereby denied.

By the Commission.

LEON M. FUQUAY, *Secretary.*

## TESTIMONY OF HOPE WITNESS RHODES ON ESTIMATED COST TO REPRODUCE HOPE'S PLANT

Transcript pages 529–761

* * *

529 Cross-examined by Mr. SPRINGER:

Q. Mr. Rhodes, you are a stockholder in Ford, Bacon & Davis, are you not?

530 A. That is correct.

Q. And you are also a stockholder in the Standard Oil Company (New Jersey)?

A. Yes.

Q. And the Ford, Bacon & Davis firm has a contract for valuation and other services, I understand, with the Standard Oil Company of New Jersey and its subsidiaries, has it not?

A. It has a contract with one of its subsidiaries, which performs services for various natural gas companies, namely, Gas Company, Incorporated.

Q. Do you know the annual income derived from that contract?

A. I do not recall what it is; no.

Q. It is substantial, is it not?

A. Oh, yes. The Standard Oil Company of New Jersey is one of our more important clients.

Q. Are you directly responsible for unit costs of all construction and overheads used in this reproduction cost new estimate?

A. I specified the principles to be followed in determining these unit costs, the methods of ascertaining labor rates that would have to be paid, the prices that would have to be paid for materials, and I sat in and consulted freely and continuously with the men

531 responsible for the detail work of the various classes of construction.

Q. Did you use costs observed or used on other projects which you listed on pages 6 and 7 of Exhibit 16, to arrive at the unit cost used in the reproduction cost new estimate here?

* * *

Q. That is on pages 6 and 7 of Exhibit 16-A.

A. The costs in some of these projects and also the more than 45 years of experience of Ford, Bacon & Davis were called upon, as well as my own personal experience, extending over 35 years—they represent a composite judgment which is based on all of that experience.

Q. Have you had personal experience in a particular construction project which is similar to the Hope System?

A. Yes.

Q. Will you describe that, please?

A. The construction of the Southern Natural Gas Corporation's system as a whole was handled under my immediate direction in the field, and simultaneously the pipe line construc-
532 tion of the Mississippi River Fuel Corporation.

Q. Can you give us the dollar amount of the construction, approximately?

A. About 35 million dollars in that particular sphere of operations that were under my direction, which was carried out in the period of about a year.

Q. Exactly what did you do in that construction project?

A. On the Southern Natural Gas Company's construction project, Ford, Bacon & Davis were the agents of the owners, the agents for the Company. The Company itself had previously decided to carry out the construction itself, got into difficulties, and called us in to help them and act as their agents. The company's own organization carried on relations largely with public authorities and matters of purely a corporate nature. They carried on the immediate relations with the bankers in getting the money, and I was responsible for everything else.

Q. You mean that you were the resident engineer?

A. I was more than that: I was the officer of Ford, Bacon & Davis acting and functioning as agents for the Southern Natural Gas Corporation in that entire operation.

Q. Did you supervise the acquiring of the right of way?

A. Not personally; no.

Q. How many days did you spend in the field on the
533 project?

A. The work of directing between these two jobs, some $35,000,000 in one year, is essentially an executive job. I spent probably a third of my time away from the office on various construction operations where there was some difficulty or something requiring special attention.

Q. Did you have prepared a reasonably accurate analysis and summary of the costs of construction of natural gas projects which you say you supervised?

A. The accounting on that project was all handled by men working under my direction. The men in charge of the accounting later continued with the company as the accounting department of the

company after curtailing, of course, the additional men required in the construction period.

I had no specific analysis of the cost of construction made in the form of the unit costs of all operations. I did purchase in our office, without other officers—we did purchase the pipe. I let most of the contracts for the construction and the portions of the construction that were built with our force account. I organized the personnel to build those portions of the property.

Q. Have you ever had responsible charge of construction of natural gas properties in West Virginia?

A. The only construction work with which I have been
534 connected in West Virginia was the construction of a 60-mile pipe line to carry liquid propane from the Kentucky state line to South Charleston, West Virginia.

Q. Is that construction comparable with the construction required in a natural gas pipe line system?

A. The methods of construction are the same; yes.

Q. Are the materials?

A. They are the same; yes.

Q. Exactly what did you do on that project?

A. Well, as the——

Q. (Interrupting.) You were the Chief Executive?

A. I was the principal executive in Ford, Bacon & Davis on construction matters. I personally negotiated and secured the contract for the building of the line. I approved the specifications, discussed the planning of the line with the owners, on account of the special features of the liquid to be carried, and otherwise spent comparatively little time on the line.

Q. Have you had responsible charge of the construction of natural gas properties in Pennsylvania?

A. Only in an executive capacity.

Q. And in Ohio?

A. In Ohio the same is true. Pipe line construction—it should be designated as that, because our only construction work
535 in Ohio along the lines of the natural gas business was a gasoline pipe line from Toledo to Detroit.

Q. Was that construction project comparable to a natural gas system construction?

A. The methods of construction and the materials used are identical.

Q. What other natural gas construction have you supervised in the Appalachian area?

A. There are no important projects other than those which have been named.

Q. And for all of these projects, you have not analyzed the costs of construction for purposes to be used in this reproduction cost new exhibit 16–A to I, inclusive?

A. On the construction work which we ourselves have carried out, namely this liquid propane line in West Virginia and on a gasoline pipe line in Pennsylvania, and this gasoline pipe line from Toledo to Detroit, together with a considerable number of other projects, we have analyzed the costs. The particular ones that were named were actually constructed by us, and of course, we have all of the cost records available.

Q. And did you use them in preparing the reproduction cost new estimate in this case?

A. We used them in guiding our judgment as to what was the proper performance of men and machines in West Virginia.

536 Q. Are those analyses available for the Federal Power Commission engineers?

A. The analyses which enable one to form his judgment and to reflect the considerable experience of an engineering organization such as ours, I have not considered as being appropriate material for working papers. They are not in convenient form to be understood by others. Analyses are, in general, in such work, not carried to the finished condition of the completion of working papers that are to be prepared for examination by others. Incidentally, in connection with those papers are costs and information with respect to the construction of other lines that were given to us in confidence and we cannot make them available to anybody.

Q. Do you mean that we must read your mind, that we cannot have access to the foundation of the reproduction cost new estimate?

A. We should be very glad to show a competent, experienced engineer, familiar with natural gas construction, the process which we went through in arriving at our final conclusion as to performance, but I should want to point out that those working papers are not complete and that there are some parts of it which were given us in confidence, that we could not show.

Q. Can you tell us now what weight you gave to those cost analyses in preparing this estimate of reproduction cost

537 of the Hope System?

A. Well, with respect to pipe lines, these cost analyses compared with experience and supervising the construction and estimating in advance the cost of some several thousand of miles

of pipe lines, that experience had to be used in analyzing the costs. The costs of lines are affected by more things than appear on the face of it. I have clearly in mind two construction jobs which we had cost records on, one of which was constructed in ordinary weather and the other of which was constructed in just about the wettest period that has ever existed in the territory involved. The lines were of the same size, the country was very similar, but the one built in wet weather cost fully twice as much as the one built in dry weather. I am talking now about the laying costs.

Now, in analyzing these various costs, it is necessary to know the facts, or you can be very badly misled, and incidentally this wet weather experience of ours was ignored, except to the extent of measuring the possible effects of the normal rainfall in country such as West Virginia.

Q. Then, in your assumed construction period of three years for your reproduction cost estimated of the Hope System, that was related to normal weather conditions of West Virginia?

A. That is correct; the normal amount of rainfall, and assumed no attempt to work at all in the worst two months of
538 the winter, generally January and February.

Q. Are the laying costs which you used in reproduction cost new comparable to the described costs of wet-weather construction experience that you have just named?

A. The reproduction costs or cost of laying pipe lines, which is what we are talking about, is based on weather conditions that are normally to be expected in ten months of the year in West Virginia.

Q. Is that lower or higher than the experience of the wet weather conditions which you described previously?

A. Much lower.

Q. Then you will make available the average cost analyses to our engineers?

A. I will be glad to have those analyses explained to an experienced pipe line engineer, but it is understood, however, as I explained before, they are nebulous, and some of it cannot be shown.

Q. Nebulous and hypothetical?

A. Not at all hypothetical. The costs are facts, and this valuation is based on facts.

Q. Nebulous facts?

A. No. I said the working papers are not complete to the extent that working papers need to be carried to be made available in the independent examinations of others. You do not

539 label things. They serve your purpose and then you are through with them.

Q. Do you have a uniform formula for analyzing costs of construction projects?

A. No.

Q. In preparing your reproduction cost new estimate, Exhibits 16-A to I, inclusive, what consideration did you give to the actual experience of the Hope Company in the construction of its property as recorded on its books?

A. The performance of men in handling pipe line construction by the company during the year 1925 was given careful consideration. The book records were available as to the performance of men, and this experience of the Hope Company during periods of heavy construction, was one of the guides to the final conclusion which we reached.

Q. Does the extent of your reliance on that information show in your working papers?

A. No. The engineers in reaching conclusions as to what is the fair and proper average cost or average performance do not specifically weight specific things. They take into account all of the facts that are at their command at the time, and they temper those facts with knowledge of the conditions under which the construction is carried out. They take into account their other

540 experiences on other projects, and reach a final conclusion, and the process of getting the final answer is not mathematical.

Q. You say that your experience has been mostly as an executive on pipe line construction. Do you mean that you have assistants who are experienced men and convey from their minds to yours these various elements that go to make up the costs?

* * *

The WITNESS. Well, as to the first part of the question, I have not worked in the ditch. My responsibility has extended from executive work where I was immediately responsible, and I spent quite a lot of time in the field on actual construction. A great deal of the work is far from executive when there is trouble. It has extended from that on some projects to, as I explained before, the complete executive charge of a large operation such as that of the Southern Natural Gas Company.

With respect to the second part of the question, I have assistants working for me, and who worked on this job, who themselves have actually been out in the field, men who have worked in the ditch in

West Virginia and know what can be gotten out of the men.

541 These results represent the combined opinion of these men, and they place before me the facts of their own respective kinds of experience, and I reached the final conclusions as to the basic performances to be used, based on their experience, extending, as I say, right down to the man in the ditch.

The TRIAL EXAMINER. Their experience was recorded, was it not?

The WITNESS. My experience, yes.

The TRIAL EXAMINER. No; their experience. That is, the experience of the man in the ditch and the man who stands on the side of the ditch is recorded as to the productivity of the men and the machines, from day to day from week to week and from month to month, is it not?

The WITNESS. Yes; but generally the cost accounting, during the construction of a pipe line, particularly that of contractors, is carried out in the manner to assist them in bidding on future jobs. No two pipe line constructors use the same method of cost accounting. The contractor changes his methods from job to job, and for that reason the records of construction of several contractors or several job foremen cannot be put down in a table and added up and divided to get the answer. It is necessary to find out what they mean.

The TRIAL EXAMINER. Do you and your assistants always use the same methods at the same time?

542 The WITNESS. My job was to bring these things so that they were talking the same language, and that the fellow that directed the job as an executive would talk the same language as the fellow that was the job foreman.

The TRIAL EXAMINER. What I am trying to find out is how you found out that you were talking the same language.

The WITNESS. Because, having known these men for many years, you learn their language.

The TRIAL EXAMINER. I judge then that they always used the same method, is that correct?

The WITNESS. They generally mean the same thing by the same words, and it is quite important in building up a composite result of their experience, to do that. Your field men, for instance, that is, the foreman out on the job, he is very prone to thing of performance as the time that he can boast about when he has been able to get a good day. The executive responsible for the job discounts that, and if he is responsible for putting in a bid, he has a tendency

to overdiscount it, the same way as the actual construction foreman has boasts in his ideas.

All of those things have to be ironed out, and they have been ironed out at the expense of a great deal of effort in this particular job.

The TRIAL EXAMINER. The effect of that is that the
543 estimate of costs which might be made on the basis of the field man's experience would be increased by the action you would take on that information; is that not true?

The WITNESS. In general that is so; yes. The field man——

The TRIAL EXAMINER (interrupting). Well, it is a fact, is it not, that your estimate of the costs of a proposed project is based on your actual experience in connection with the actual construction of similar projects?

The WITNESS. That is right.

The TRIAL EXAMINER. And that experience is recorded, is it not?

The WITNESS. It is recorded in the working papers, yes, sir.

The TRIAL EXAMINER. And in making your estimate of the cost of this proposed project, you referred, I presume, to those recorded costs, did you not?

The WITNESS. The starting point of the estimate—unit price estimates—in the working papers here, is the composite result of our experience. We do not start de novo on every valuation or every reproduction cost determination which we make, and build the costs all over again. Some of these unit costs, particularly in matters of building construction, of the type involved here,
544 have been used by us for so long, that we do not redetermine.

In connection with pipe line construction, we started with certain basic performances of men and machines, of sizes and kinds of pipe lines that control the type of equipment that you will use.

Now, in arriving at those basic performances, that is the job that we have to do in advance of preparing unit costs, and it is work that is done not only in connection with this particular piece of work, but with a lot of pieces of work that we have been and are doing.

As I say, there are working papers in our own private files that could be explained in rather considerable complexity to an examining engineer.

The TRIAL EXAMINER. You start then with the same basis in making your estimate with respect to every project?

The WITNESS. All of the work that we have done recently in pipe line construction, for instance, starts from this same experience

of ours, but it was only within the past two or three years that I have attempted to bring together in concrete form this diversified experience of our firm and this work here represents that experience after pretty careful and thorough study of our experience and experience of the men.

The TRIAL EXAMINER. You may proceed.

By Mr. SHRINGER:

545. Q. Mr. Rhodes, did I understand that a composite judgment of the analysis of construction costs is the basis for your unit cost development in this case?

A. That does not, I think, quite represent what I have in mind, but it is the joint opinion of our men experienced in pipe line construction work.

Q. When you speak of your men experienced in pipe line construction, are all of those men experienced in pipe line construction in West Virginia in the area covered by the Hope system?

A. No.

Q. Then you may have in your composite judgment, a man's idea of unit costs in the Panhandle region as compared with the Appalachian area?

A. Such costs were taken into account. The method of arriving at costs was not to say "Well, here is West Virginia and it costs so much in West Virginia." A hill is a hill, whether it is in West Virginia or Alabama, or where it may be, and the contour of the ground and the roughness of the ground is measurable by the steepness of the hill, and if a pipe line is to be built up a hill of a certain steepness, it does not make any difference what state it is in. The time required to lay that line both as to machines and as to men

546 is practically the same in West Virginia as elsewhere. It is more in West Virginia, for instance, than the same hill would be in Arizona, because it rains more in West Virginia, but basically, the costs are about the same.

If you get flat country, of which there is a little, but not much, in West Virginia, it does not make any difference whether you are laying pipe line in West Virginia or where you are laying it, in our experience in arriving at the unit costs of laying pipe lines here, analyzing the experience in every conceivable kind of country, from country where pipe lines cost less than half as much as they do in West Virginia, to places where pipe lines on the average cost twice as much as they do in West Virginia. We have taken into account all of the various kinds and classes of countries.

Q. Then did you give the West Virginia appraisal its relative weight in your composite judgment?

A. We made a very extensive field survey of the construction conditions in West Virginia. The 1,300 miles trunk line, for instance, were very thoroughly surveyed. They were seen at every place where they could be gotten at with reasonable facility, and then on the remainder an extensive portion was actually walked by our construction men to find out just what construction conditions would be encountered.

With respect to the smaller lines that were not the trunk lines, an extensive sampling of roughly ten percent was selected
547 covering the whole territory, and those lines were studied and their construction conditions determined.

The result of it is that we actually know the construction conditions in detail that would be encountered on something more than 2,000 miles of pipe line built by this company.

Q. Was the Hope Company's experience over those same pipe lines that your men walked available to you?

A. The Hope Company's experience on the lines, the major lines, built in 1925 when they were extended south into Boone County, the company's labor performance in connection with that line was studied, in conjunction with the actual construction conditions encountered or to be encountered in building the line today. Not as they were then. They used oxen when the built that line, they use tractors today.

Q. You say that you had assistants available who had dug pipe line ditches in West Virginia. Will you name those men for us?

A. I stated that I had one. His name is Evans.

Q. Did he tell you what his conception of labor performance was in West Virginia for pipe line construction?

A. He sat down with us and we discussed very thoroughly the performance of labor under the various kinds of conditions
548 and the different degrees of hilliness and so forth, and he accepted the figures, as we finally used them.

Q. You spoke of using modern equipment in the performance basis of your reproduction cost new estimate. I assume the cost would be less than was actually experienced then or twenty or forty years ago by the Hope system?

A. When Hope's main lines were built, they had some construction equipment, but they were largely hand jobs. We found on careful analysis that aside from equipping the various gangs with tractors, with side booms and winches to assist in handling the pipe

and snaking it or skidding it through the woods, we found that it did not pay to use machinery in West Virginia. There are places, many places, where machines could be used advantageously, if you could get the machines there, but it costs so much to move this heavy ditching machinery from place to place, from the good places to other good places, over ravines and across streams, that the cost of moving fully offset the advantage of these machines.

So, as it stands today, the laying of a pipe line in West Virginia, assuming the same rate of wages, would be somewhat lower, because there are better roads, and more things of that nature, but there would not be any very great difference.

549 Q. Do you know that a 92-mile transmission pipe line was built partially with machine ditching in the Hope system?

A. Yes, I do.

Q. And have you reproduced that section of the property with hand ditching?

A. The particular line in question was not specifically estimated. The unit costs were developed to fit the country encountered in each size of line, and the lines over—in one line, for instance, that is not the only line of that size.

For instance, we found the average construction conditions to be encountered by all 12-inch lines, the unit cost for all 12-inch lines were built up to meet those average conditions.

The constractor on the line in question which you have, it was well known, lost money.

Q. How do you know that?

A. Because I have a letter from that contractor telling me what it cost him to build the line and how much he received for it.

Q. May we have access to that letter?

A. That was given to me in confidence.

Q. Will you tell us how much money he lost?

A. I don't recall the exact figures, but the pipe-laying contractor received a payment for the work, I think approximately

550 his cash out-of-pocket costs in laying that line, without anything to cover his general office overhead or the use of his machinery, let alone any profit.

Q. Was he an experienced pipe line constructor?

A. Yes.

Q. And you reproduced the same line with hand ditching and the other elements for more or less than he was paid for the job?

A. It would be more than he was paid for the job, yes, sir.

Q. You took into consideration the confidential letter in reaching your estimate?

A. That letter was one of the letters, one of the pieces of information which was given me in confidence, which I had in mind as the experience which helps us to determine what the true costs of laying pipe lines were in West Virginia.

Q. Do you know what proportion of pipe lines of the Hope Company were built by contractors?

A. Comparatively small portion. Just what proportion was built, I do not recall.

Q. Would it be ten or twenty per cent?

A. I have not in mind the figure at all.

The TRIAL EXAMINER. Do you know whether this contractor set out with the idea of losing that much money on the job?

The WITNESS. No, he set out with the idea of making
551 money; there is no doubt of that.

The TRIAL EXAMINER. He made a mistake in estimating costs?

The WITNESS. He did. He estimated it too low.

By Mr. SPRINGER:

Q. In your estimate, you would make a handsome profit, would you, for the construction of that same pipe line?

A. No.

Q. With hand ditching, where machine ditching was actually used?

A. The machine ditching was used at an expense that was, as nearly as can be ascertained, about the same as the hand ditching. They dug the ditch with machine very cheaply, but they spent a lot of money getting the machine from hill-top to hill-top, and that is our experience in the line at South Charleston. We used a machine on one part of that job, which should have resulted in a reduced cost of ditching, but as a matter of fact, the total cost of the ditch in the part that was dug by machine, including the machine wear and tear, was greater than the part that was done wholly by hand.

Q. Do you know whether any other pipe lines at that time were built for the Hope Company by a contractor?

A. I don't recall any other important line that was
552 built by contract.

Q. What proportion of pipe lines in your reproduction cost new estimate have you assumed would be built by contractors?

A. I have assumed that they would all be built by contractors in accordance with the practice of the industry, when large projects are built.

Q. From your familiarity with the construction of the Hope system, would you say that it was built within three years or built up gradually, over a period of forty years?

A. It was obviously built up over a period of forty years.

Q. And you have assumed a construction period of three years?

A. That is correct.

Q. Then would you characterize the development of the Hope system as piecemeal?

A. Some of it.

Q. Are you familiar with the construction of pipe line designated as H-162, that was built in 1925?

A. That pipe line was one of the lines, the performance on which was available when we arrived at our performance figures.

553 Q. Would wholesale construction costs be lower than piecemeal construction costs, for pipe lines in West Virginia and the Hope Company in particular?

A. That depends on where you draw the line between piecemeal construction and wholesale construction.

Q. What is your definition of piecemeal construction? You just said that the historical development of the Hope Company was piecemeal over a forty-year period?

* * *

554 A. If I recall correctly I stated that some of it was built by piecemeal construction.

Q. Now, I want to get your definition of "piecemeal."

The TRIAL EXAMINER. I believe he testified that piecemeal construction would be more costly than wholesale construction. Is that what you said?

The WITNESS. No; I do not think so. At times it is; yes, sir.

The TRIAL EXAMINER. Well, then, you could not make any distinction so far as costs are concerned, between piecemeal and wholesale construction?

The WITNESS. Yes, I think you can, and if may explain. Hope Company, in its forty years of development, has built the greater part of its pipe lines—I don't recall just what the percentage is. They built—the field lines for instance, most of them are small, short lines, a few miles long, built with small crews of rather skilled pipe line men that the company carries from year to year and does carry them because of their exceptional skill and because they are

exceptionally good men. Those men will build two or three or four-inch lines considerably cheaper than any contractor can
555 afford to move in and build them, largely because of the fact that they have developed a peculiar skill in that direction.

Now, when the large operations come about, requiring large gangs, two or three hundred or five hundred or ten thousand men, they are talking about in this reproduction operation, then the company will go out in the labor market and be satisfied with the average laborer. The average laborer will not do as much work in a day as the man who has been selected and chosen by the Hope Company, and when you are dealing with large pipe lines of large operations, where large numbers of men are required, the cost to anybody will be greater than the cost of building these small lines, like the field lines.

Now, on the other hand, if the company sends a crew of men out, away out in the country, and lays a couple of hundred feet of two inch line, that would be an expensive piecemeal operation.

So, when you are dealing with piecemeal versus wholesale construction in the pipe line business, you can state small, very small, piecemeal construction is expensive. When it gets to an operation that when you carry it with fifteen or twenty men kept busy for a week or two, you get very efficient piecemeal construction, but as the numbers grow larger and more men are required to be
556 picked up in the labor market, then the costs proportionately become more and more extensive, so that on very large construction operations where thousands of men are required, the companies customarily call in contractors who have had a general greater experience in putting together quickly and training large groups of men to work on this work.

So that large work—take for instance your transmission lines work—there is very little difference that would be shown between the company's own costs and our reproduction costs in the aggregate, translated into the same dollars, but when it comes to field lines, where the company uses its own skilled men, the company's costs translated into dollars would be rather less than reproduction costs.

By Mr. Springer:

Q. Do you mean that the company's own skilled men with this particular technique are getting less than 40 cents an hour, that you assumed for men working in gangs for men under your reproduction cost estimate?

A. No.

Q. They are high salaried men, are they not?

A. They are paid on the average higher wages than we assumed would be paid for the average laborer.

Q. And they have not undertaken a construction job on an even small portion of the Hope System once, have they?

557 A. Well, when they had built line H-162 south into Boone County there was a rather sizeable operation that required several hundred men. I have not studied the various detailed operations carried out by Hope, but most of the big lines—any line 12 inches or over, requires such a large gang that if it is a line of say 50 miles or more, generally, the companies would have to dilute its own particularly chosen men with the ordinary average laborer who is available.

Q. Assuming that the prices were the same during the historical development of the Hope Company's system as they are today, the Hope Company having been developed on piecemeal, and your assumption of reproduction costs a three-year wholesale program, would it not cost less—I mean the wholesale program?

A. In the aggregate it would cost a little less than the actual cost to the company in terms of today's dollars.

* * *

558 Q. Is it not acknowledged in the construction field that natural gas pipe line construction at wholesale construction costs are about twenty percent less than piecemeal construction?

A. No.

Q. You have never heard that before?

559 A. I have heard all kinds of statements about what it does and what it does not cost, and I think that my explanation of this morning as to the differences between wholesale and piecemeal construction might explain that.

Q. Do you recall the actual experience of the Hope Company in building H-162 in 1925, which I think is about 100 miles of 20-inch pipe line?

A. No; I do not recall any of the details.

Q. Do you know that the Hope Company built that itself without contracting the construction of it?

A. I believe they did, yes.

The TRIAL EXAMINER: Do you call that piecemeal work or wholesale work?

The WITNESS. That is big enough to be wholesale work.

By Mr. SPRINGER:

Q. Is that not in dollar amount many times larger than the H-192 that was constructed under contract by the Hope Company?

A. It is larger, but I would not say it was many times larger.

Q. H-166 is a 20-inch pipe?

A. That is right.

Q. And the other is 12-inch pipe?

A. That is right.

Q. You spoke of H-162 being, in your opinion, wholesale
560 construction. Will you define the lower limits of wholesale construction?

A. No such definition can be given. It is a gradual transition from a tiny job which would represent piecemeal construction to larger and larger jobs, and ultimately you get a job large enough to require several hundred men on the one job, and that approaches wholesale construction, but in general, the bigger the job the harder it is to get enough men to do a good job.

Q. Is it true, Mr. Rhodes, that contractors are able to assemble large crews for assembly of pipe lines, and to do that which you term wholesale construction, more cheaply than the companies?

A. That is so; yes, sir.

Q. Well, why did you omit leaseholds from your reproduction cost new estimate?

A. Because I was asked to do so.

Q. By the counsel for the Hope Natural Gas Company?

A. Naturally.

Q. Do you think that a reproduction cost new estimate of a production system property is complete without including the reproduction cost-new estimate of the leaseholds?

A. They must be reflected in some form or other in the rate base.

561 Mr. SPRINGER. May I have the question and the answer repeated?

(The record is read.)

By Mr. SPRINGER:

Q. Your answer would be "No," would it not?

A. It is not a reproduction cost of the whole property, that is true, but it is complete as to the property which is constructed.

Q. Mr. Rhodes, you would not reproduce the gas wells and the related equipment if you did not have the leases on which they were placed?

A. That is true, yes.

Q. On page 13 of Exhibit 16–A you state that the assumed construction period for the reproduction cost new estimate is three years. Do you have a working schedule upon which that estimate is based?

A. No.

Q. Don't you know the size of the crews and the amount of the machinery required to reproduce this property under the three-year construction program?

A. It would take about 12,000 or 14,000 men.

Q. How do you know it would take that number?

A. That has been estimated from the amount of work of the various classes required to be done. It is a rough estimate
562 that was made.

Q. That is a judgment figure?

A. No. I did not myself make the estimate, but from the amount of pipe line work to be done and the amount of building construction and the amount of compressor station equipment, it is possible to arrive at approximately the number of men that would be required to build it, without working it out in detail. The number of men would vary from time to time. It would probably take six months before you were going full blast on a construction program of that kind. It might reach the peak in a year and a half, and then gradually in the last six months, it would fall off to relatively few men.

Q. Don't you have a construction program assumed for the purposes of this estimate?

A. Well, for the purposes of the estimate we assumed the property could be constructed in three years, and that is a fair length of time to be consumed in constructing a property of this size and complexity.

Q. Do you know whether you have 100 men, the first day or 1,000 men the first six months, or don't you know when your payrolls are going to enter into the unit cost of development in the case?

A. As I stated before, some 12,000 or 14,000 men would be required during the peak of construction.

563 Q. Do you know the amount of machinery that is going to be required from month to month?

A. The working papers would disclose in some form the approximate number of gangs involved in pipe line equipment, from which the amount of machinery could be figured, but having developed a

unit cost per foot on the different sizes of pipe, it is just a mere incident as to how many men you are going to use in the aggregate, except to know whether it is a few men or many men.

Q. Is it not possible that if you are wrong on your assumption of the number of men, that it may take six years to reproduce this system?

A. We are not wrong on the number of men required to do the work.

Q. But you don't know the exact number from month to month that would be required?

A. If you find your progress is slow on your schedule, you just get more gangs of men at work. In an actual construction program, involving rates of construction approximating this, you do lay out a program of construction, to know when you are going to require your men and when you are going to require your materials, but it may vary from time to time as to the number of men and the gangs, as you find you are slipping behind or
564 getting ahead of your construction program.

Q. But your working papers do show the period of time required to construct each major portion of the Hope system, do they not?

A. No.

Q. How do you figure your interest during construction?

A. The interest during construction as used in this reproduction cost new exhibit was the interest during construction agreed to in the former Cleveland case and used on the Ohio Commission, and I have reconsidered it as to whether or not it fairly represented conditions today, and I think that it is reasonable and proper interest during construction, that is not figured specifically as to progress or anything of the kind. In a three-year construction period of a complex property it would indicate to me that 8 percent is a fair interest during construction.

Q. Have you assumed, Mr. Rhodes, on a three-year period of reproducing the property that not one unit of it would be in commercial operation before the end of that three-year period.

A. No.

Q. What is your construction and operation program for the estimate of the reproduction cost?

A. Some parts of the property could be completed and
565 placed in operation within a year or fifteen months after the beginning of active construction. It would be possible to put some of it in operation. Other parts of the property, for

reasons of economy, it would be necessary to be built well ahead of the time it would actually be placed in operation, to avoid back-tracking and going back to work in a given neighborhood.

If I had adopted the sometimes-used formula of interest during construction that I understand is used by the Interstate Commerce Commission, I would have arrived at a much higher figure than 8 percent. That formula calls for interest for half of the construction period plus three months. In other words there would be twenty-one months use of the money, if I had followed the Interstate Commerce Commission formula for interest during construction period. If you take 8 percent as the cost of money, that would mean a 14 percent interest during construction. I have used 8 percent.

Q. And you employed the principle that when a unit of property is available for use, interest and taxes on that cease?

A. Not when it is available for use, but when conditions will permit it to be used. A piece of property may be completed months before it would be possible to connect it into the system and actually use it in operation.

566 Q. Have you employed the principle in your reproduction cost estimate of which I spoke?

A. Not by specific application.

Q. You say that you took the figure that was agreed to in 1931 in the Cleveland rate case, is that what you said?

A. That was the start, yes.

Q. But you were also aware that the figure was not agreed to in the 1937 Cleveland rate case.

A. That is correct.

Q. Do you have any outline of your construction program that would reveal the number of men, the amount of machinery required, the dates of cutting into operation of the various units of the property which you described?

A. No.

Q. On page 14 of Exhibit 16-A you state that you used labor rates and material prices prevailing during the winter of 1938-1939?

A. That is right.

Q. I suppose your reproduction cost new estimate is based on spot prices?

A. No, it is not.

Q. Have you used material prices and labor rates that have been averaged over the last five years or the last three years?

567 A. The prices I used are prices that have remained substantially the same from the Fall of 1938 up to the present time. There is a tendency upward in prices at the present time.

Q. How do you know that, Mr. Rhodes? What is the basis for your statement. Do you have indexes?

A. Various indices are available. I note, for instance, that there has been no change in the price pipe, casing and tubing, which are the dominant materials, the principal materials entering into the construction. I know that there are no appreciable changes in the cost of compressor station machinery.

Q. Have you available in your working papers the prices for pipe annually from 1925 to date, and would you read those into the record?

A. No, the working papers are all based on unit prices for certain sizes of pipe, and I know from the prices that are being paid by purchasers of pipe that throughout 1938 and 1939 they have been substantially unchanged.

Q. Could you name the sales of pipe to which you refer?

A. I investigated the prices for approximately $3,000,000 worth of pipe, casing and tubing that was purchased in the latter half of 1938 and the first half of 1939, and in some cases the latter
568 half of 1939, and found that the prices that were actually paid for the pipe at the factory were somewhat higher than the unit prices at which I priced the inventory in the price inventory of this report.

Q. How many million dollars worth of pipe would be required to reproduce the Hope system?

A. About ten or twelve million of pipe, and casing and tubing approximately the same amount. Those are rough figures.

Q. And to price twenty million dollars worth of pipe to reproduce the Hope system, you referred to prices during the winter of 1938 and 1939?

A. And the latter part of 1939.

Q. But you did not make an average price, you say, over the last five or six years?

A. That was made in the working papers of some other estimates of reproduction cost new, and I do not recall at the moment when all of the prices of pipe changed, but there was a peak of prices in 1937 and the first part of 1938. Before that the prices, for a year or two, were approximately the same as they now are, and of course earlier than that, in the periods of extreme industrial depression, the prices of pipe were even lower.

Q. Can you give us the pipe prices?

A. I could look up the prices for pipe in these various
569 reproduction cost new estimates I have made. I do not have them at hand.

Q. Are those the prices actually paid for pipe, or your estimates?

A. The prices to which I refer were the prices quoted to me by the manufacturers of pipe, which prices are the prices that I found were actually paid by the purchasers of three million dollars worth of pipe in 1938 and 1939. The task of making comparisons is so great that I did not attempt to cover all of the purchases that I might have studied, had time been available, but they reflected far more than three million dollars worth of pipe.

Q. That was not one purchase, these three million dollars?

A. Oh, no; it was purchased by one group of pipe-using companies.

Q. We would still like to know, Mr. Rhodes, what the source of your price of pipe information is?

A. Well, the first source of pipe information was the pipe mills who were requested to give us the prices of large numbers of sizes and kinds of pipe, casing and tubing entering into this property. They were asked to give us their lowest prices, having in mind the quantities involved.

We started with those prices. We made an investigation, and I think personally I had an investigation made to find
570 out whether those prices were actually being paid for pipe, and I found that the group of properties, of which this is one, bought—I think it was three or four hundred thousand tons of pipe or casing in 1938 and 1939.

I had a considerable portion of this pipe examined as to price and found that this three million dollars worth of pipe and casing and tubing as a sample of the three hundred thousand tons, which was twenty million dollars, more or less—I found that on the average the price paid was greater than the prices that I had used for pricing the various sizes of pipe in the inventories.

Q. Did the prices you assumed take into consideration the discounts available on carload lots?

A. The prices that I have used in pricing the inventories took into account all discounts that the manufacturers acknowledged. They were based on purchases of carload lots into, I might say, trainload lots of pipe. I did find that in certain cases still further discounts were obtainable, under certain conditions, and that was reflected in this reproduction cost new by a lump sum reduction in

the total cost of the pipe lines beyond the unit prices that had been quoted to me by the manufacturers.

Q. How much was that lump sum deduction?

A. Roughly a million and a half dollars.

Q. And in percentage?

571 A. Ten per cent of the mill price.

Q. That was for pipe lines only and not for pipe tubing and casings?

A. There are no discounts available for casing and tubing other than those which are quoted to us by the manufacturers.

Q. And do you have the prices used for tubing and casing before you?

A. Not on my desk. They are available in the working papers. The unit price, including freight, and so forth, are of course available in the price inventory, but the mill prices are not in convenient form.

Q. Do you remember the basing discounts and all the other discounts for tubing and casing?

A. The only discount for tubing and casing that was quoted to us was the 2 per cent for cash. The prices given in general covered all of the equipment of a well, which is the way the casing and tubing is customarily sold.

Q. Are you aware of the fact that the jobbers get a ten and a five per cent discount in addition to that?

A. I don't know what the jobbers get, but I do know what the producers have to pay for the pipe.

Q. Don't the purchasers get a basing discount?

A. The purchasers buy all of their casing and tubing
572 at the manufacturers' quoted prices less two per cent for cash. There are very few, if any, exceptions to that, that I have been able to find.

Q. You don't know of any large quantity of purchased pipe, where there is no more than a 2 per cent cash discount?

A. Casing and tubing is not purchased in large quantities, as a general thing. The manufacturers of oil-well tubular goods maintain warehouses about the country and they maintain agents and the prices paid by the purchaser are the same whether they are bought directly from the mill or through the agents.

Q. Is there any difference in the manufacture of casing and tubing and line pipe?

A. Yes, the casing and tubing is manufactured with much more regard to rigorous specifications as regards flaws, quality of workmanship, and so forth.

Q. You have assumed in this three-year construction program for your estimate of reproduction cost new, that you would have purchased all of the tubing and casing required within the three year period?

A. Yes.

Q. But you have not taken advantage of any large lot purchase discounts?

A. There are none to be had.

573 Q. When you sought quotations from the manufacturers on the prices of pipe and tubing and casing, the manufacturers knew that it was for appraisal and rate case purposes, did they not?

A. I think so; yes.

Q. Do you know of any actual negotiations for the purchase of pipe, tubing and casing, that are comparable to the requirements of reproduce the Hope system?

A. Not in recent years.

Q. Do you know of any?

A. I have heard of none.

Q. Does the Hope Company have the advantage of the purchasing services of the Standard Oil Company of New Jersey?

A. If they asked for it.

Q. They have used that service, have they not?

A. I have not investigated to what extent they have used it, but I understand that they did, from time to time.

Q. Do you know what discounts the Hope Company has received on the purchase of large quantities of pipe?

A. I don't know what prices they paid for pipe, except in 1938 or 1939, and find that the prices they have been paying, as in common with all the other properties owned by Standard or affiliated with Standard, are the prices that we used for pricing the priced inventory before the one and a half million

574 dollar discount for large purchases.

Q. Do you know the price paid for pipe used in the H-192?

A. No, I do not.

Q. On page 14 of your Exhibit 16-A, you state: "Since that time"—that is 1938-1939—"the level of these rates and prices has remained substantially the same."

By what means are you able to determine that?

A. Well, as to pipe, casing and tubing, which are the principal materials, I find that the fact is actually so as reflected by the

purchases of this group of companies. I also know from the price indices which we have—we keep up certain price indices in our office—we have available purchase price indices prepared by other people, and they show that, for construction such as that involved in the natural gas properties, the overall price level has been substantially the same throughout the period from the middle of 1938 up to the end of 1939.

Q. Would it not be a coincidence if the estimates which you give for the Hope system today was the same answer you give in your Exhibit 16–A which is as of December 31, 1938?

A. Today there is a tendency upwards of prices. What is going to happen depends entirely upon what happens in Europe.

575 Q. Would it not be a coincidence if the cost of reproduction new estimate in any new natural gas property were the same on dates varying by six months?

A. No. This reproduction cost new estimate covers a period of substantially eighteen months during which there is no substantial change in the prices.

Q. You say "substantial change." I say it would be a coincidence if the answer were the same if you made a reproduction cost estimate six months apart on the same system?

A. If it were the same to a dollar, it would be a miracle.

Q. On page 14, you state that the company would purchase all materials except the building materials. What company do you refer to?

A. The company capitalized in this exhibit refers to the Hope Natural Gas Company.

Q. Have you considered the discounts available on quantity purchases made by the Standard Oil Company of New Jersey?

A. Yes; the ten percent on pipe, for instance, was based on information obtained from the Purchasing Department.

Q. Did you secure bids from responsible contractors on a competitive basis, indicating what it would cost to install the major units of the property?

576 A. No.

Q. Who wrote the letters to the manufacturers requesting the sales prices on the materials and equipment?

A. Letters were form letters, substantially alike, and of the same tenor, and I participated in their preparation.

Q. Was the letterhead that of Ford, Bacon & Davis, the Hope Natural Gas Company or the Standard Oil Company of New Jersey?

A. The Hope Natural Gas Company, as I recall. It is so long since that my recollection may need refreshing, but I think it was the Hope Natural Gas Company.

Q. Were payments made for the quotations which were furnished?

A. In some instances we were asked to compensate for the trouble which the manufacturer went to in furnishing these prices.

Q. And as you have said, the manufacturer knew it was a quotation without the probability of making a sale?

A. That is true, but they were asked to furnish us the lowest price at which they were currently selling things.

Q. Were they practically subject to negotiation, as you and I know it?

A. Well, I found purchases of some hundreds of thousands of tons of pipe, casing and tubing that were purchased by this group of companies in 1938 and 1939 that were purchased
577 at the prices that the manufacturers quoted us.

Q. Could you give us the names of those companies?

A. The full tonnage of pipe refers to the natural gas and oil pipeline companies, in which the Standard Oil of New Jersey has an important interest, so that the materials are from time to time purchased through their own purchasing department. That group of properties includes the Appalachian group here, the Hope Natural Gas Company, East Ohio Gas Company, People's Natural Gas Company, the New York State Natural Gas Company, and the Reserve Company before it was dissolved or merged into the Hope Company. It also includes the Standard Oil Company of Louisiana, which operates a very extensive pipe line system in Louisiana, the Oklahoma Pipe Line Company in Oklahoma, the Ajax Pipe Line Company from Oklahoma to St. Louis, the Humble Pipe Line Company, which operates in Texas, the Humble Oil and Refining Company, the Tuscarora Pipe Line Company, which is a gasoline pipe line running east to the Atlantic Seaboard. Those are the principal properties.

Q. Do the prices which you used in this valuation reflect prices that would be available from the quantity purchases required for the distribution plant of the Hope Natural Gas Company, East Ohio, and the People's distribution system included?

A. Do I understand correctly that you are referring to this entire Appalachian group of properties in its entirety?

578 Q. That is correct.

A. I am afraid that if that number of properties were to be built within a period of a few years, the price of pipe would advance materially instead of there being discounts.

Q. Why?

A. Because there would be so much business to go around that the manufacturers would advance their prices.

Q. Do you mean that they would violate the law?

A. No; they would ask for more money for their product if they could get a fair share of the business. How they may go about it, I do not know, but I feel sure that there would be an increase in the price of pipe, casing and tubing, if purchases would be thrown on the market equal to the entire requirements of this group of companies.

Q. You assumed that the Hope Company would be reproduced in three years. Do your pipe prices reflect your conception of a hypothetical increase under such an assumption?

A. They assumed the continuation of the conditions that have existed since about the middle of 1938 up to the end of 1939.

Q. On page 14 of Exhibit 16–A you state that where equipment was no longer being manufactured as specified, the cost of superseding equipment at lowest quoted prices of competent manufacturers were used as a basis of pricing. Will you
579 please list the location of equipment where you used prices of that character?

A. In the gas engine driven compressor portion of the Hastings station, there are four large compressor engines of the type and character that are no longer available except to be made to order. The patters are not available, and prices quoted on equipment of that kind that has not been made for years are not representative of the present-day prices of equipment. As related to those particular engines, we priced them on a per-horsepower basis, equal to the price per horsepower of the largest gas-engine-driven compressor unit, single tandem, as these engines are, which is now currently being offered in the market.

Q. Would you complete your list of equipment where substitute equipment is priced?

A. I would not call it substitute equipment; I am merely pricing a price per horsepower that would be paid if one wanted to put in the largest commercially available unit today. In the other cases, the Company has a considerable number, fifteen or twenty smaller engines of the same general types of such engines. They are of a type that have not been made—they

are called Snow engines—and they have not been made by the successor of the Snow Company, namely the Worthington, for a number of years. They are very similar, however, to en-
580 gines that are being offered today both by Worthington and by Cooper-Bessemer, the two principal manufacturers of large gas engines. We found the Cooper-Bessemer prices for that size engine were lower than the Worthington prices, so I took the Cooper-Bessemer prices which were in line with the prices at which Cooper-Bessemer is actually selling such equipment.

Q. Is that a full listing of equipment which is no longer manufactured, and which you secured their prices for?

A. That is two important items. The Company also owns a considerable number of center crank single tandem engines made by the National Transit Company. They were priced as though they were the standard single standard engines, with the side crank. Those particular items cover the greater part of the equipment that is not now manufactured.

Another type which is not so plentiful is long-stroke 48-inch stroke Westinghouse engine—the Westinghouse Company is no longer in the business of building gas engines, so we priced those engines at the cost per horsepower of the engines that had the nearest comparable dimensions ast o bore and stroke which primarily control horsepower.

Q. Are the engines at the Hastings plant still manufactured by Westinghouse?

A. They are no longer like those.

Q. On equipment which is no longer being manufac-
581 tured, and is at the present time obsolete, did your price quotations represent the cost of a comparable unit on the basis of performance abilities or on substitute equipment?

A. There is no equipment of any importance on this property that is obsolete to the extent that it will be retired by obsolescence. So actually, I should say that the answer to your question is "No," there being no obsolete equipment.

Q. Did you price equipment with comparable performance ability?

A. I priced the equipment, as I stated before, with the lowest prices quoted by the manufacturers of equipment as nearly like this in question as we were able to get the prices on.

Q. Did you make the test of performance? Are not the new machines more efficient than the old machines?

A. As to gas engines, not particularly.

Q. How about turbines?

A. Under the operating conditions of these turbines, which is a relatively low pressure turbine, and relatively low vacuum, I should say that with the water in that country and the other efficiency factors, the efficiency of the turbines today is not appreciably different from that which obtained at the time those turbines were built.

Q. On page 12 and 21, you state that wrought-iron pipe was priced as steel pipe. Will you tell us the quantity and the
582 location of pipe which you know to be wrought-iron and which has been priced as steel pipe?

A. All pipe bought before 1900 must necessarily be wrought-iron pipe, because steel pipe was not available on the market. The pipe bought between 1900 and 1908 or 1909, some was of one kind and some was another. Having no intention of replacing wrought-iron pipe as such, I made no investigation as to exactly how much of it there was.

Q. You do not know the quantity nor the location of the wrought iron pipe in the Hope System?

A. I made no investigation.

Q. On page 15 of Exhibit 16-A you also discuss the freight rates. Would the freight rates that you used be weighted average freight rates, giving effect to quantity and tonnage for the materials, based on their actual destination?

A. Carload freight rates were used throughout. I believe that answers one of your questions, because that is the lowest freight rates which are available. Second, knowing that we might use the same prices for the same identical machines and materials as to different locations, we used freight rates from the mill to the weighted average destination of the particular type of equipment involved.

Q. Where did you assume the property would be shipped?

A. Lorrain or McKeesport or other parts of the Pitts-
583 burgh district—Youngstown. Nothing specific.

Q. You had no schedule of purchases and routing?

A. That is correct.

Q. Did you have a central destination point or did you have geographical area destination points for the Hope System?

A. We used the freight rates weighted to—what you might call the weighted average destination for pipe, and that freight rate is substantially the same for many of the pipe mills in the Pittsburgh district.

Q. Will you tell us how you computed the weighted average?

A. The exact form in which the calculations were made, I do not recall, but the natural way would be to find approximately the amount of pipe that went to each point of receipt, and weighting the freight rates to those points pro rate to the tonnage that went to those points.

Q. Do your working papers reveal the detail of that?

A. They will reveal it in some form, yes.

* * *

584 Q. On page 16 of your Exhibit 16-A, you state that in the price inventory there are no allowances for contingencies and omissions other than those included in the unit costs. What contingencies and omissions have you included in the unit costs which you applied to materials and machinery equipment, the inventories for which were taken from the investment
585 ledgers?

A. The inventories from all sources or from any source, you might want to consider, are generally incomplete. We priced the pipe lines, for instance, on the number of feet that we found were contained in the finished pipe lines. We merely used the investment ledgers or the records of the length of pipe in the investment ledgers, as a guide in reaching our final inventory. Pipe is used for odds and ends, pipe is damaged, lost or cracked off, when you figure on the basis of the completed line. Our inventory of valves and fittings, for instance, was made by a practical field survey of the valves and the fittings in use. We did not take the tremendously long list of valves contained in the investment ledgers, for instance; we took the list of valves we could find and could find were being used. It would not be complete in any reasonable time.

The same was true of dresser couplings. We took those on the basis of 20 foot spacing. Obviously, to anyone skilled in the business, 20 feet is rather a liberal spacing, although a customary spacing for dresser couplings.

The incompleteness of the inventory as to these details is taken care of in a miscellaneous materials cost allowance.

On the cost of laying pipe lines, it would be seen by an examination of our working papers, we started out with
586 unhampered performances under perfect conditions, everything running perfectly, no trouble from the rain, no labor trouble. We assumed that the men could start off bang at full

efficiency in running a gang of a few hundred men, which we know cannot be done.

We made an allowance in the unit cost for laying pipe lines, covering what we deemed to be the effects of the weather and the moving around from place to place of various gangs, and the lost motion of that nature.

These unit costs are the only places in reproduction cost new where there is any allowance for things of that kind.

Q. Can you tell us in dollar amount what the contingencies and omissions would equal?

A. I have not figured it out.

Q. Do you know what percentage was inserted for the contingencies and the omissions?

A. The percentage was different in the case of different unit costs, and we would have to refer to the working papers to determine that. I may have some excerpts from the working papers in that connection.

Q. Will the development of your unit costs show those details?

A. Yes; the development of the unit costs will show with respect to laying pipe lines specifically what percentage
587 allowances were made for contingencies. The development of the unit costs will also show the amount of these material costs, not only for contingencies in the nature of material contingencies, but for the cost of purchasing, and things of that nature.

The general unit costs for things of the nature of building construction will show the contingencies. The performances that we have used are performances that might reasonably be expected. They are not affected quite as much, for instance, by weather, as the cost of laying pipe lines.

Q. Is your treatment of omissions and contingencies in the unit costs in your estimate related to the actual experience of the Hope Company?

A. It could not be related to the Hope's experience. The amount to be allowed for omissions and contingencies is necessarily affected by the amount you include in your basic figures. If you are able to develop, or have the time to go to the expense of developing your basic figures completely enough, the omission and contingencies can be made very small. If your basic figures are relatively rough, the allowance for omissions and contingencies must be larger. The allowances that we have made, in our

opinion and judgment, properly reflect what is in the principal direct costs, and what additional amounts should be allowed to adequately reflect the whole cost of the project.

588 Q. In your Exhibit 16–A, page 16, you state that the development of unit costs is available in convenient form. Is that a volume or a series of volumes of working papers?

A. At the present time it is a stack of papers as high as that table [indicating] in which there are literally hundreds of developments.

Q. Do you have a copy of those?

A. There is only the one copy of the whole. Some of it has been copied.

* * *

594 Q. Mr. Rhodes, is this reproduction cost new estimate set up in accordance with the 1939 West Virginia Uniform System of Accounts for Gas Utilities, which is Exhibit 13 in this case?

A. The classification of the inventory contained in here is that which was given to me or my men by the company's accounting department as having been so set up. I find from going through these myself that there are some details which might be in a
595 different account from what they are, but it is substantially correct as I see it.

Q. Are there any differences between your classification of pipe lines and compressor stations, and that of Mr. Tonkins, as shown on Exhibit 1?

A. I have not made a comparison of the two groups. As I stated before, the groupings of the inventory were made by the accounting department of the company, and the breakdown, as between the production system pipe lines and the transmission system main lines is that of the company.

* * *

Q. Have you, in preparing your reproduction cost new estimates followed the instructions as to the costs properly includable in the plant accounts prescribed in the West Virginia Public Service Commission Uniform System of Accounts for Gas Utilities, 1939?

A. In determining this reproduction cost new, I deter-
596 mined what it would cost to build the property. The detailed classification as to this, that, and the other thing, I paid no attention to. While I am generally familiar with what is properly includable in the Code of Accounts, I have

everything in here that is properly includable, and nothing but what the company would be called upon to spend money in the case of a reproduction of the property.

Q. Can you segregate for each of the structures, improvement and equipment accounts, as shown in your reproduction cost new estimate, the amounts included and described as components of construction cost on pages 51 and 52 of the West Virginia Public Service Uniform System of Accounts for 1939?

A. That could be done at the expenditure of a good deal of time and effort. The determination of the unit cost was not made for the purpose of facilitating such a breakdown, but rather for the purpose of facilitating the determination of reproduction cost new. We have made no breakdown which would permit the breaking down of those costs into eighteen different classifications of things that comprise the construction costs.

Q. Then you are unable to give us the total number of dollars in your reproduction cost new estimate which is described
597 in the West Virginia system of accounts as contract work?

A. I could, but not without going to considerable trouble and expense.

Q. And that is true of all of the other classifications of the components of construction costs in that system of accounts?

A. That is true.

* * *

Q. Mr. Rhodes, on page 11 of Exhibit 16–A, you stated that the items of property covered by this reproduction cost estimate are classified by the company in accordance with the new Uniform System of Accounts for Gas Utilities, prescribed by the Public Service Commission of West Virginia effective January 1, 1939. Do you know who, in the employ of the Hope Natural Gas Company made that classification?

A. Well, the classification on questions that appeared to our men as requiring an answer were in general referred to Mr. Cross, one of Mr. Chisler's principal assistants.

Q. Is Mr. Cross an accountant or an engineer?

598 A. He is an accountant.

Q. Does not his classification differ from Mr. Tokin's for pipe lines?

A. Mr. Tonkin's classification, as I followed it, is the practical classification of the operating man. The classification in the Code of Accounts is intended to be an accounting classification.

and I think there are many lines where it would not be clear as to in which category they belonged.

Q. Mr. Rhodes, on page 17 of Exhibit 16–A you state that in pricing the inventory of the buildings and structures you used appropriate costs per cubic foot. Did you price the quantities and materials entering into the individual structures being priced?

A. In the case of the larger buildings, considerable portion of which are compressor station structures, while the priced inventory shows the costs as a cost per cubic foot, a reference to the working papers of the unit cost development will show that the total cost of each particular building was determined by pricing all of the classes of work entering into it and then the cost per cubic foot determined and transferred to the price inventory, to avoid the complication detailed in pricing.

Now, as to the buildings of moderate size, for instance, they were divided into groups by types of construction, and
599 typical buildings of each group were priced in complete detail, as is shown in the working papers, and buildings of other dimensions than those specified buildings were priced at prices per cubic foot that fairly reflects the difference in the cost as between the different sizes of buildings.

The very small buildings, like meter houses or meter boxes, those were divided into appropriate groups of buildings of substantially the same size and dimensions, and they were priced on the basis of an average unit. There are several hundred buildings in some cases that are substantially alike.

Q. Could you tell us what proportion of the building and structures were actually inventoried, in order to price them on the group basis you have described?

A. I do not have available the proportion, but a considerable portion of the total dollar value was priced in detail, I know that.

Q. But that which was not actually inventoried has been priced on an approximate group basis?

A. Well, all buildings, except the little box-like structures, are priced at a price per cubic foot that reflects the particular size and type of building involved. Each particular type of building would involve pricing in complete detail of all of the work entering into the construction of several buildings of that group.

600 Q. Do the books and records of the Hope Company reveal the quantity of materials bought by the company which entered into the construction of these buildings?

A. Only to a limited extent.

Q. How did you determine the kind or the amount of material in each structure?

A. Each structure had previously been inventoried as of 1931 in complete detail. The inventories were agreed upon by the representatives of the City of Cleveland and of the Company and of the Ohio Commission as being fair inventories of all of the buildings that were then owned by the Company. Some of those buildings had disappeared and others had been changed, all of which facts were ascertained in the field.

Now, as to a great many of these buildings, a recheck of all of the details was made, to truthfully determine for me as to whether I could reasonably accept the agreement, with which I had previously nothing to do as an individual, and I found that these old agreed-upon inventories in the aggregate, detailed as they were, were satisfactory for the purpose of pricing these buildings. Many of the buildings, in fact, practically all of the buildings that we priced in detail were rechecked in complete detail. The other buildings we did not question in detail. We had the description and the dimensions which were accepted and
601 found to be correct, but no complete detailed remeasurement was made of buildings found to be unchanged, other than a few, so really it is a considerable number which were taken in absolutely and which we rechecked in complete detail.

Q. Then you used the group basis of pricing?

A. That is right.

Q. Referring to page 18 of Exhibit 16-A, on gas well construction, did you make a study of the Hope Company's experience as to the cost of drilling wells?

A. We made a study of their experience over a period of years, and tried to coordinate the speed of drilling with the character of rock through which they were drilling, and found that there were so many indefinitenesses about the company's records that we could not use them dependably.

In general, the time spent to drill wells as shown by the company's records, where they had complete records, was greater than the time that we felt should be required to drill these wells. For this reason we made a complete study of other people's experiences in drilling of wells, and have based our pricing on what you might say is the typical average experience in West Virginia.

Q. Could you name the other properties which you studied to get that typical average price?

A. I would have to look up the records, but I can say
602 this, that every contractor of any size, doing work for the company or for any other gas companies, was interviewed as to the length of time required to drill wells in this territory and as to the equipment that he used, and as to his methods, that information was also compared with records of similar performance of wells drilled by the other gas companies that were operating in immediately contiguous territory, and based on that investigation, we determined just what would be required in the nature of equipment, and we found an average number of days that would be required to drill the wells of the company, based on the experience of all of these contractors, and we found their experiences with respect to depreciation and wear and tear and the wearing out of well-drilling equipment, such for instance as the cables and lines and tools used, and put together all of these factors which are primarily non-company experience, arriving at a figure which would be considerably less than would have been arrived at had we based our cost on the company's own drilling experience over a number of years.

Q. When we reach the discussion of specific costs, you will be able to reveal the exact components in the making up of those costs and give them to us?

A. The working papers show the costs in great detail; yes.

603 Q. You say that the unit costs used in arriving at the costs, are contract costs? Did you secure competitive bids from responsible contractors?

A. No.

Q. How did you determine the contract cost?

A. We did not attempt to fool the contractors into making bids for wells. That would not have been a proper procedure. We confended ourselves with finding out what the contractor's experiences were. We put together their most favorable experiences rather than their bad experiences as reflected by some of the company's records, by figuring it as a contract cost; the meaning of that is related to the fact that we have in there an allowance for contractor's fee and contractor's overhead.

Q. Do you remember the percentage that you allowed for contractor's profit?

A. There was an allowance of ten percent, out of which the contractor would have to pay his taxes, gross earnings tax in West Virginia, pay for his general overheads, and insurance against abnormal risks, which occur from time to time, in something that

goes wrong in the drilling of wells, in fishing expeditions, and the time required to get tools out when they drop to the bottom of the well. How much would be left for profit, I do not
604 know, but the contractor would do well if he had 5 percent.

Q. Did you consult any of the other companies in the Appalachian area on their drilling costs?

A. We consulted others in this district where the costs are rather lower than in some of the other Appalachian districts. We did not directly reflect some of the low costs of drilling wells, because we find that some of the contractors, instead of paying the current going wages, were getting men to work twelve hours a day with not a proportionate increase in the pay. Of course, low cost prices can be achieved by such a method. We could not assume any such method in this reproduction cost, because it was being done contrary to the law as to the Wages and Hours Act, and we therefore ignored a few of the low-priced drilling costs that some contractors were offering.

Q. Did you inquire into the well-construction costs of the United Fuel Gas Company?

A. Without reference to the details, I would not care to say.

Q. Your papers would reveal that?

A. The papers would reveal those whom we saw and what we found out.

Q. Do you know what portion of Hope Company's wells were purchased?

605 A. Not offhand; no, sir. I believe it is in the record already.

Q. Is it a small portion?

A. I don't recall. I think it is a minor fraction, but just what it is I do not know.

Q. How did you determine the weight of casing and tubing in the wells which were purchased by the Hope Company?

A. There was no record available in most cases as to the weight of casing and tubing. The size is available, and when we did not know the weight, we had to price the particular casing and tubing at the average weight of the casing and tubing that had been purchased by the company. There are some cases where the wells that had the casing and tubing pulled where that information was available, but in general, where we did not know the weight, we took it at the average weight of the company's purchases.

Q. How did you determine the weight of the casing and tubing in the wells which contained the second-hand or used casing and tubing?

A. Most of the wells containing used casing or tubing was casing or tubing which was put in from the company's own stocks and was accordingly purchased company's casing and tubing. Where there was no record of what was in a particular well, we had to rely on the general proportions of the
606 company's purchases of the different weights, and which we analyzed in considerable detail.

Q. Your reproduced wells which contained originally used casing and tubing had an average price for new pipe purchased for the Hope Company, is that right?

A. We made no differentiation as to where the tubing and casing came from.

Q. Is it true that wells in the different regions of West Virginia, although having the same depths, will have different costs?

A. They may have; yes.

Q. Is it generally true that the average costs per foot of deep wells is more than that of shallow wells?

A. In the broad way, yes; but as compared with wells within reasonable limits in any territory, the price per foot is generally the same. Compared with 1,500-foot wells, 3,000-foot wells should cost more per foot.

Q. In your opinion, the average cost per foot of drilling a 5,000-foot well would be greater than the cost of drilling a 1,000-foot well?

A. In general; yes.

Q. And is it not a fact that the Hope Company has wells varying in depth from less than 1,000 feet to approximately 5,000 feet?

607 A. Yes; a few.

Q. And do you know whether the wells of the Hope Company now in use were drilled, a large number, at one time, or drilled over a number of years?

A. They were drilled over a number of years.

Q. In your experience, do you know of a case where a construction program was undertaken involving the drilling of 3,000 gas wells within three years?

A. No; but I know of cases where drilling of more oil wells was carried out in that period of time.

Q. By one company?

A. No; by several companies.

Q. Page 18 in your construction cost of gas wells at $2.43 per foot, do you include the cost arising from the use of drilling equipment?

A. I do not see the reference to the price. I do not think it is mentioned there.

Q. As a matter of principle did you, in your construction cost of gas wells add x dollars per foot as the cost arising from the use of drilling equipment?

A. Yes.

Q. And the details of that computation would be available in the working papers?

A. That is correct.

608 Q. On page 5 of Exhibit 16–C and also referring to page 18 of Exhibit 16–A, you state that a field inventory was made of the closing-in valves and fittings of about ten percent of the wells in each district, and that office records were checked on ten percent of the wells in each district of packers and other details. Then your selection of the ten percent was based on a geographical selection of wells instead of ten percent of the wells classified by the number of producing strings?

A. I don't recall the exact number of wells of each type, but this ten percent sampling was designed to arrive at the typical bill of materials entering into this miscellaneous equipment for wells of the several numbers of producing strings. Whether the exact ten percent applied to all, I don't know. Obviously it did not in the case of the two wells with five producing strings.

Q. And then on page 5 of Exhibit 16–C the inventory of closing-in-equipment which you priced, was not an actual field inventory, but the inventory resulting from the sampling of ten percent of the wells which were checked in the field, is that right?

A. The unit price came from sampling the number of wells of each particular number of producing strings, however, was determined by reference to the actual records of the

609 detailed equipment going into the wells.

Q. Of ten percent?

A. No. All of the wells of the number of each particular class was studied from the records. The unit cost, however, was based on the detailed pricing on an inventory of the detail material such as nipples, T's, check-valves, and so forth, which was based on the ten percent sampling.

Q. The source of the data you used as the inventory of miscellaneous equipment on page 5 of Exhibit 16–C was that office records or field records?

A. It was based on the office records in the operating department. There is no way of seeing what is down in the wells; it is necessary to refer to the records of the department, either the accounting department or preferably the producing department where they have records of almost everything that is in the wells.

Q. Did those records show inventory and miscellaneous equipment of the other gas wells?

A. To the extent that it was known. Naturally, wells that have been purchased, have not been disturbed, and the knowledge was incomplete as to what was beneath the ground.

Q. Referring to page 18 of Exhibit 16–A you indicate that the inventory for quantity of casing and tubing of the wells was prepared by correlating the investment and other
610 records. Did you adopt the investment records of the company for quantities in this case?

A. Correlating of the two records was made and in the case of most of the wells the agreement was substantially perfect. In some of the wells we found a disagreement as between the two records, in which case every possible source of information was checked to determine which was correct. There are some wells, for instance, where we found more tubing in the wells than could physically exist there. That was corrected for, and the correlation of these two sources indicated those particular wells where we needed to make further investigation, and the best source of information as related to each individual well was finally adopted and the records were corrected.

Q. What were the two sources?

A. The two basic sources are the accounting department records of what was charged out to the well, and the records of the producing department, as to what was in the well. They might be compared also to the records at the time of drilling the well which shows the amount of casing and tubing sent out to the well and the amount left in the well. All sources of that kind were examined, and as I said, wherever there was a discrepancy in the sources, the best possible investigation was made to correct it.

611 Q. And then you adopted the book records; both sources being book records?

A. Well, of course, the only possible record is something on a piece of paper, because obviously you could not pull casing or tubing from a well and measure it. It was necessary to adopt

book records, but as I have pointed out, there were different sources different departments, from which records may be obtained for the purpose of reconciling differences.

Q. How did you determine which one to take?

A. The records of each particular well were studied in detail when there was a disagreement and a conclusion was reached in conjunction with the operating people and with me as to the well, as to what was the most reliable source of information with respect to any particular well in trouble. Generally, there was little difficulty in reconciling the differences.

Q. Do the records you speak about show the weight and kind of tubing and casing in the wells of the company?

A. They show the kind and size and only in some instances do they show the weight.

Q. How did you test it to determine whether the pipe in your analysis of the Hope Company's purchase vouchers was the same as the pipe now being used in the Hope System?

612 A. Practically all of the pipe that Hope has bought is still in its wells—certainly a large portion of it is. We ascertained by an analysis of the purchase vouchers for the greater part of what they had bought that there were certain weights of each particular kind and size in certain proportions. Being unable to find out exactly what existed in each and every well, we necessarily had to take the proportions of casing of the different weights as actually purchased by the company, for the purpose of this reproduction cost new. There was no other reasonable alternative.

Q. Then you did not know which wells contained used tubing and casing and what portions had been retired.

A. No; as to each well, we have no knowledge of what was new when it was put in, and what had been previously used by the company.

Q. Is it true that the weight in pounds per foot of casing and tubing is an important matter in determining this cost per foot?

A. Indeed it is.

Q. Then for example on page 4 of Exhibit 16–C, if all the two inch cashing were four pounds per foot instead of five pounds per foot your estimate would be approximately twenty percent of $200,000, in excess of the actual, would it not?

A. There are no figures on page 4 that would indicate
613 such to be the case.

Q. Do you see column 4? "Pounds per foot" on page 4, Exhibit 16–C?

A. Yes.

Q. You use five pounds, and if the five-pound pipe were four pounds, then referring to column 7, the total cost would be twenty percent less, or $200,000.

A. But the company did not purchase enough four-pound pipe so that that would be impossible.

Q. That is an example. We might run through the whole computation.

You said that you did not know what tubing and casing was in the company's wells, whether it was used, new, or portions of it had been retired, nor did you know the weight?

A. As to any individual weight that is correct; yes, sir.

Q. On page 4 of Exhibit 16–C, if all of the 6⅝ths inch casing were 17 pounds instead of 20 pounds, the difference would amount to approximately $455,000 on a similar computation.

* * *

614 The WITNESS. That is correct.

By Mr. SPRINGER:

Q. Then the pipe weights which you have used are based upon your own study, without relation to the facts in the case, and another engineer might prepare a similar study and reach different conclusions?

A. As to the first question, I prepared my study based on the facts in the case as to what weights of casing and tubing of the different sizes the company had purchased in its history, which is a very good indication of what remains. What another engineer would do, of course, I do not know.

Q. But did you say that you analyzed only a percentage of the pipe purchased?

A. We analyzed practically all of the pipe and casing purchased by the company over its history—the oil well pipe casing.

Q. But you did not make an analysis of the pipe, casing, and tubing in the gas wells purchased, did you?

A. No; that was taken to be the same weight on the average as the wells in which the company placed the tubing itself.

Q. Mr. Rhodes, you are aware of how the Hope Company runs its warehouse, are you not? I mean by that, that they buy large quantities of pipe and that may be transferred to

615 the Hope Construction and Refining Company, and may never get into the Hope system?

A. That may be; yes, sir.

Q. If there are any errors in such a transaction, that is reflected in your reproduction cost new estimate, is it not?

A. No reason to expect any errors. The wells are all substantially the same depths and built by the same people, they would be likely to have the same weights of casing and tubing from year to year as the needs of the situation changed.

Q. But you do not know that to be a fact, do you?

A. I am not certain as to exactly what was sent to the Hope Construction and Refining Company.

Q. They often transferred pipe to the Reserve Gas Company?

A. How often, I do not know.

Q. At the bottom of page 18 of Exhibit 16-A, you have set out various units of cost encountered in well-drilling operations. Do you have a break-down by units of these costs?

A. I described classes of costs and the working papers disclose in great detail all of those costs.

Q. You state that you made contractors' allowances?

A. That is correct.

616 Q. And did you also state that all of the property would be built by contract under your assumed construction figures?

A. No, sir.

Q. Will you correct me on that?

A. I stated that the Hope Company, or the companies who owned the property, would furnish all of the materials entering permanently into the construction, except the building materials and the like, and that all wells would be drilled by contract, all pipe lines laid by contract, all compressor stations built by contract, but that some of the detail work in connecting lines to the wells and items of that nature would be carried out by the company's own forces. Most of the installation would be by contract under this set-up. Most of the materials would be furnished by the companies.

Q. And did you make a uniform allowance for contractors' profits in your estimate?

A. We made a contractors' allowance that was ten per cent in connection with wells and pipe lines where only the installation cost was involved, and about eight per cent on the contractors' costs on the buildings where we had the allowance supplied also for materials.

Q. And on the compressor station equipment?

617 A. On the compressor station equipment, the contractor's allowance was approximately eight per cent of the contractor's cost, but nothing at all for the cost of his equipment—just on the installation of the equipment.

Q. On page 19 you state that you have selected 330 wells on which your studies were based. Did you have the field conditions relating to those wells summarized?

A. They were all summarized in the working papers.

Q. On page 20, you state that there are large quantities of pipe in the Hope system which are not presently manufactured. Can you tell us what type of pipe that is?

A. You are referring to casing and tubing; are you not, rather than to line pipe?

Q. That should be casing and tubing.

A. The working papers will show just which were the weights and sizes that are not now being regularly manufactured, and I would have to refer to that to refresh my memory.

Q. On page 20, you state that the unit prices used for casing and tubing are based on the lowest quoted prices less 2 percent cash discount, plus freight to average destination. Should there be an additional discount for quantity purchases?

A. They are not available in casing and tubing.

Q. Recently you referred to your knowledge of the drilling of 3,000 oil wells over a period of time.

618 A. Yes.

Q. Do you know whether or not the casing and tubing purchased for those 3,000 wells were purchased at a discount in addition to the ones reflected on page 20 of Exhibit 16-A?

A. They were built at a different time, and I do not know what prices were paid. I have been assured, however, by the purchasing department, which is purchasing materials and has been right along, that for a considerable number of years there has been no discount on the casing and tubing except the discount of 2 percent for cash, and that the drillers of these wells which were in the East Texas oil fields all paid the same prices.

Q. Does that mean that the casing and tubing prices are twenty percent higher than pipe prices?

A. Roughly.

Q. Do you know the tonnage in the Hope system for casing and tubing and transmission pipe?

A. Not offhand.

Q. I believe you have stated that the amount of money was about equal?

A. If I recall correctly, and I would like an opportunity to correct the figures after looking them up, that some 240,000 tons of line pipe was involved and about 150,000 tons of casing and tubing.

619 Q. On page 21, referring to pipe lines, in your final computation of reproduction cost new for pipe lines, did you rely upon the book inventory?

A. The book inventory, the accounting department inventory, and the engineering department inventory were compared and discrepancies found. In many cases the discrepancies were remedied by new surveys and actual field measurements on those lines, and with the exception of the discrepancies which we did find, we reached the conclusion that the book records were acceptably correct.

Q. How did you determine the weight per foot of field and transmission pipe lines?

A. In the case of the major pipe lines—and by that I mean the larger diameter pipe lines such as ten or twelve inch lines, from ten to fifteen miles long or more—there was generally available a record as to the actual weight of the pipe purchased. In the case of the field lines, the records were not so clear, and again they found it necessary to rely on the weights as purchased by the company over a period of years.

Q. But under the method of operating the warehouse of the Hope Company, is it not true that when the pipe enters the warehouse, it loses its identity relative to the weight and number of feet?

620 A. In general, that is so.

Q. In general?

A. Yes.

Q. Is it possible under this method that lightweight pipe of a certain size could be sent to a new construction job, and capitalized in the original cost at a much higher value than the actual tonnage?

A. I don't know what might have happened. I have not examined the details of such transactions.

Q. On pages 21 and 22, you refer to drips. Did you use the book inventory of drips in the trunk lines in your classification of pipe size?

A. The determination of the number of drips of each pipe size was made largely in the field from the records and consultation with the operating men as to the drips. The book inventory was only relied upon incidentally.

Q. Did your men physically inspect the drips?

A. Obviously not, because they are buried.

Q. Did you use book inventory of valves and fittings in the branch lines?

A. No.

Q. What was your source of information?

A. We examined in detail all of the records available with respect to the approximately ten percent of the mileage of the branch lines geographically well scattered through-
621 out the system.

We determined what was there by field records, and we determined from the men in the field what valves there were. In the case of most of the valves, they were in obvious locations and it was merely the unusual valves that were in question, and required investigation, but in general the inventory of valves with their attendant fittings was based upon the field investigations, and by field, I mean both physically in the field in some cases and in consultation with the men who actually had occasion to operate the valves from time to time in the handling of the gas through the system.

Q. On page 22, you stated that the unit prices of the pipe used are based upon the prices quoted by manufacturers generally applicable to carload lots, f. o. b. mill, less 2 percent for cash and 10 per cent discount. Does this carload price given effect to current basic discounts which apply?

A. This carload price less the 10 percent and 2 percent is the price that I have found has been paid for more than a million and a half dollars of pipe by this company and some of its affiliates during the last year or so.

Q. Is it not customary in large quantity purchases
622 for basic discounts to be granted to the purchaser?

A. I don't know what you mean by "basic discounts."

Q. It might be as high as another 50 percent, might it not?

A. No.

Q. I think I will withdraw that; it should be fifteen percent. Does that sound better, Mr. Rhodes?

A. I am not sure that I know what you mean by a basic discount.

Q. Is it customary in the quotation of prices of pipe to give a list price and then a basic discount?

A. To answer that directly, pipe quotations are based first on what is sometimes called car prices. For each and every kind of pipe and most weights, there is a list price that is the same list price practically for all manufacturers. The people who are buying pipe at the time have furnished to them discount figures, maybe 50 percent or whatnot—which figures are also published in the trade journals which, if applied to the list prices, will give the mill price, for the number of feet that is charged for small quantities of pipe. Unless you are a large purchaser, you would pay those prices until you made purchases, approximately a trainload of pipe, but if you are a large purchaser of pipe, you automatically get a ten percent discount, even on ten or fifteen car-
623 loads which the purchaser who is less regular in his purchases would not get until he exceeded a trainload and then negotiated for it.

Now, when any purchaser of pipe is going to buy more than a trainload of any size, he generally negotiates the price.

In the last year and a half, various discounts have been granted. Taking into account the heavy tonnage of pipe that has been bought by this company and its affiliates, and without any discount beyond the ten percent and the two percent, the two percent being for cash, I reached the conclusion that as related to the property of this size, it would be possible to obtain further discounts, not to exceed ten percent of the whole price on all of the pipe, but that no further discount could be available with respect to the purchase of the casing and the tubing.

Q. You spoke of buying a trainload of pipe. Would it require a trainload of pipe to reproduce the Hope system?

A. At least.

Q. And if the Hope Company purchased requirements for reproducing its system within a three year period, under its purchasing arrangement with—did you say the Standard Oil of New Jersey?

A. I don't know what its arrangement is with the
624 Standard Oil of New Jersey, but they do have large purchases of pipe made from time to time with Standard Oil of New Jersey's purchasing department.

Q. That on a negotiated purchase of the requirements to reproduce the pipe line and well systems of the Hope Company, it is very likely that there would be an additional discount, which is not reflected in your inventory here?

A. No. The additional ten percent which I have reflected in my estimate is my best judgment of the saving to be made after full consultation with the purchasing department of the Standard Oil Company of New Jersey, and it is based upon the opinion of the men who purchase most of the pipe for them that ten percent would be a fair amount to expect on these special negotiations.

Q. If Hope Company bought it directly in the quantity required to reproduce its system, would it get an additional discount?

A. In my opinion, they would get this ten percent discount and no more.

Q. Could you state the name of the person upon whose opinion you rely on the large quantity purchases of pipe?

A. Yes, I could.

Q. Will you?

A. I don't know whether I should or not.

625. Q. You relied on that man's opinion?

A. I was guided by his opinion, yes.

Q. I do not want to ask you for anything——

A. (Interrupting.) I am not sure that I should reveal his name. If it means anything, I can do it.

The TRIAL EXAMINER. Did he express that as his confidential opinion?

The WITNESS. Not in the same way that I received this confidential information from contractors and constructors of pipe lines.

The TRIAL EXAMINER. That is his business, to get as much discount in purchases as possible?

The WITNESS. Yes, it is.

Mr. COCKLEY. I see no objection to Mr. Rhodes naming that person, unless he has some personal relations with him.

The WITNESS. I have no personal reasons, and I will look up his initials, I think I have them here. It is A. J. Kelly. He is rated as the Assistant Purchasing Agent, Purchasing Department, Standard Oil Company of New Jersey. And at the time I talked with him, he was the ranking man available, the purchasing agent himself being away.

By Mr. SPRINGER:

Q. On pages 22 and 23 of Exhibit 16–A you state that the construction conditions were surveyed on a portion of the
626 Hope system trunk and branch pipe lines, and recorded in the nearly two thousand field reports. Did you make a

personal inspection of the trunk or field lines construction conditions?

A. No, not in detail. I traveled and criss-crossed the lines of the company a number of times—many times, in fact over the past few years—and I have sent out men to make these inspections who have done construction work under my direction.

Q. You had experienced men then, you say, advising you of these conditions?

A. That is correct.

Q. How many men?

A. I think a maximum of about six.

Q. And could you tell us approximately how much experience each man had had?

A. All of the men had been with my firm for many years, and most of the men had actually worked under my direction on pipe line construction for ten years or more. One of them in particular had actually worked on construction of lines in West Virginia, as well as having worked for me for years.

Q. That was Mr. Evans?

A. That was Mr. Evans.

Q. On page 23, you say that most important are the con-
627 ditions affecting the cost of ditching. What conditions as to depth and width of ditch, and rock and soil conditions did you assume in your reproduction new estimate?

* * *

The WITNESS. The depth of the ditch from which we determined the cost was the depth of the ditch actually existing on the company's lines as found by the depth actually there when the lines were inspected, taking that into consideration, and also a lot of previous inspections. The width of the ditch was that in addition to the diameter of the pipe which we ourselves have found necessary in the construction of pipe lines. The amount of rock was determined by the inspection of the outcrops and
628 the character of the back fill, road cuts and information of that general nature. Other conditions affecting the cost, such as rocky soils, were taken into account, or swampy ground. The slope affects the cost of the ditch, particularly if steep slopes. All of these factors were facts which were recorded by these men who inspected it in detail, and know just what percentage of the lines of each size would encounter the different kinds of construction difficulties, what percentage of rock would be expected to be found.

Q. And all of that is detailed in your working papers?

A. All of that is detailed in our working papers, starting with the field inspection, and with maps and carrying right through to the summaries and the prices.

Q. In arriving at your factors in the cost of ditching, did you consider that many miles of the Hope Company's pipe lines are not underground.

A. We took into account the proportion of the lines which are still above ground.

Q. How did you make that estimate?

A. From every possible source of field inspection. In part by the records of the company. Those lines were largely the small two-inch lines.

Q. Are you sure that there are no large lines that are
629 not underground?

A. I stated they largely consisted of the small two-inch lines.

Q. Do you know the total mileage of the pipe lines on top of the ground in the Hope system?

A. I could refer to the working papers and find out. I have not that available here. There is approximately 3,000 miles of production system lines and approximately 1,000 miles of transmission lines. A small part of the field lines is above the ground, and that is reflected in the pricing which is all shown in detail in the working papers.

Q. Is there a segregation of pipe lines underground and above ground in your development of unit costs, or did you apply an average to both?

A. In the development of unit costs, we found the proportion of each size of line that was above the ground, and the proportion of each size which was below ground and its corresponding depth. The unit price was determined for the above ground pipe and the below ground pipe, and a weighted-average unit price was arrived at for all of the pipe of each size, taking into account the proportionate lengths above and below ground.

Q. Do you know what percentage of field lines are above ground? Do you know approximately?

630 A. I don't recall the figures. I will be glad to look it up.

Q. Would it be as high as twenty per cent?

A. I would not think it would be that high. I would be glad to look it up for you. [Examining papers.]

Q. Would you please give us the proportion for each size of line that is above ground tomorrow some time?

A. I will have to look it up, yes; and I will be glad to give it to you.

Q. On page 24, you state that the unit costs for pipe lines are based upon the company's furnishing materials and the contractors installing those materials, in permanent locations?

A. Yes.

Q. From what responsible contractors did you secure bids for the installation?

A. I did not secure bids from any contractors. I did secure contractors' records of costs in West Virginia.

Q. How do you know what a contractor would charge for installation?

A. I estimated a fair price would be paid to contractors for installing these lines. That price was based in part on consideration of the actual cost to the contractors who have
631 actually laid lines in West Virginia as well as other costs.

Q. You say "in part." That was the basis for your estimate?

A. The actual costs in West Virginia were taken into consideration; yes.

Q. Would that be a check against the ordinary estimate of your hypothetical crew, plus ten percent, in determining the cost of installation?

A. I did not set up any hypothetical crews. I determined practically what it would cost to reproduce these lines under the conditions which actually exist in West Virginia.

Q. Don't you have in your working papers for the development of unit costs, labor performance and the number of men required to construct a given portion of the Hope Company's system?

A. Those unit costs how for each sized line in each character of country and each character of holding and each amount of clearing in the right of way; they show in detail the numbers of men required for each operation and the cost required for each operation of the sizes of pipe that determined the particular class of equipment that is required in the building of lines. Light equipment, for instance, is required in the small pipe, and heavy equipment is required in heavy pipe. Those details involve
632 something like a hundred different combinations and permutations of the conditions, for which details have been set up as to the daily progress, the number of men, the equipment that would be required, and everything that is necessary to determine the costs in any and all of the widely varying construction conditions in this State.

Q. On page 24, you speak of ditching. Is it true that machine ditching costs much less than hand ditching?

A. Not universally.

Q. What are the exceptions?

A. When the country is hillier than a slope of about one in four or one in five, it is practically impossible to use machines in ditching. Up to that slope it is possible. In flat country, the ditching machine will dig a very, very cheap ditch. It requires no assistance except that of men to trip out the ditch and to grade the ditch to cover the variations in the depth required. As the country gets rougher, this ditching machine has to be helped with a tractor or bulldozer to grade the right-of-way, and as the country gets heavier and harder and harder, more and more equipment must be with the ditching machines, so that in what is called, or what is classed here as complete machine ditching, is about five machines besides the ditching machine. Even
633 that part of the complete machine ditching in places is cheaper than the hand ditching, but when the country is broken, as it is in West Virginia, the cost of getting the machines over the valleys and up the hills that are too steep to use this machinery is so great that all of the saving of the ditching machine is completely lost in the cost of moving the machinery.

Q. Do you know whether or not machine ditching has been used on a large portion of the Hope system?

A. It has been used on much of the Hope system.

Q. You have used in your estimate of reproduction cost new, hand ditching for 4,000 miles of pipe line; isn't that true?

A. The final result is that, but the working papers will show what it will cost with machine ditching, and it would seem that the hand ditching is cheaper than machine ditching in this territory.

Q. Is that based upon experience?

A. It is based upon the experience which we have had. It is based on information that I have gained from contractors who have used this method of ditching in the country, namely that the machine ditching does not pay or save anything. You can do the work just as cheaply by hand, the detailed analysis that appears in the working papers shows that to be the case.

Q. Could you name the contractors you have just re-
634 ferred to?

* * *

The WITNESS. William Brothers built a sixteen and twenty inch line from a point near Cedarville to a point not very far from Wheeling. They used a great deal of machinery on that

line and they had a great deal of trouble with that machinery. I was told by both of the Williams Brothers separately and by their general superintendent who handled the job that the machine work did not pay. I believe there were three gangs equipped with machines and one gang by hand, and the hand gang did the work as cheaply as the machine gangs.

By Mr. SPRINGER:

Q. Do you know the construction experience of Williams Brothers in building a line for the Manufacturers Light & Heat Company?

A. That is the line to which I referred.

Q. And they concluded it would be less expensive to have used hand ditching?

A. They said, as I have already stated, that they saved nothing by the machine work.

Q. Mr. Rhodes, how did you determine the labor cost for ditching?

635 A. The labor cost of ditching is the composite result of starting out with what the average laborer will do when he has easy digging in flat country without any rain to interfere, and averaging as to what he does when things are going right. We started out with that, which is approximately half a yard per hour. Men do not dig that much in West Virginia for a number of reasons. First, the soil is rocky and slows him down, and probably you could not expect more than about four tenths of a yard per hour. I am now talking in rough figures by the way, for purposes of illustration.

In the other extreme, on a very steep hillside, a man can dig perhaps not much slower than he can dig in the low country, but other men have to be made available to shore up the back fill to keep it from running downhill. Many of these hillsides on which pipe lines are built in West Virginia are so steep that if you start a rock rolling it will keep on rolling until it gets to the bottom. It takes fully twice as many men to take care of the digging of a ditch in that kind of a country.

Of course, rock enters into it. Whether it be loose rock or hard rock—all of which is taken into account—but to determine the cost of hand ditching or any other kind of ditching in
636 a country as difficult as West Virginia is a long process, but all of the details are available in the working papers.

Q. Did you check your estimate by the actual experiences of the Hope Company in hand ditching?

A. Yes.

Q. Is your estimate higher or lower than the actual experience of the Hope Company?

A. I do not recall the exact figures, but our performance for the different sizes of line, and the different construction conditions were harmonized with the known costs of a great many lines. Dividing the country as we did into different classes of country, we were able to take advantage of the cost of digging in part of the country other than West Virginia, where we knew the construction conditions. We had lines, for instance, in Pennsylvania, where we classified the country as it is here. We had lines in Kansas and at various places, so that we would know what the costs are. All of these costs entered into it. We did not depend solely on the Hope's man-hour performance in building one line, but we depended on other people's performances. Now, as to how the Hope experience agrees with the most exact figures, I don't know.

Q. Those performance figures are available, are they not?

637 A. They are available on that analysis which was mentioned this morning where the working papers have not been finished up for general informaion.

Q. Of course, the ditching conditions in the Middle West are not comparable to the ditching conditions in West Virginia, are they?

A. Yes, they are; in the same character of country, the same rock, and the same soil. If you start in with easy hand digging in flat country, it does not make any difference what state of the Union it is in, but how much rock may be in the soil will affect the cost, and we take that into account on the West Virginia rock. We do not take it into account on the Colorado rock.

Q. Do you know the total cubic yards of excavation which you assumed would be required to construct the pipe line of the Hope system?

A. I have not calculated it.

Q. Do you think you could calculate it?

A. Yes; I could.

Q. You do not have those figures available now for computation, do you?

A. They are available in Clarksburg, but the actual computation would take several minutes of the time of this hearing, or maybe half an hour.

Q. How much did you assume a man could dig in a day,

638 for your reproduction cost estimates?

A. We started out, as I say, with perfect digging, where a man would dig half a yard an hour.

Q. You did not use that in your final estimate?

A. We started out with that, and adjustments were made for rock and for slopes and for hillsides. If I recall correctly the average was between something like a third of a cubic yard per man per hour, but it is so complicated with rock and other features that in itself it means little.

Q. Will your working papers show the rock percentage assumed in your ditch digging?

A. They will show the rock percentage that was found by field inspections, and was used in determining the unit costs.

Q. You made spot checked for rock conditions?

A. They were checked by careful examination of some two thousand miles of right of way.

Q. And throughout your reproduction cost new estimate, you have assumed that all of that property would be reproduced by using all new material, isn't that so?

A. I priced all of the materials as new materials, Yes, sir.

Q. Do you know that there are hundreds of miles of the Hope system which were constructed with used pipe?

A. I don't know what exactly the mileage is, but I do
639 know that there is a great deal of pipe in the Hope system, that was once in another location and was purchased new by Hope originally.

Q. How do you know that?

A. As to the exact mileage I do not know, but as to the amount of pipe that has been bought and various movements of the lines with which I am familiar that necessarily followed.

Q. Do you know that H-199 is constructed with secondhand pipe?

A. The number means nothing to me. I will have to know where the line is.

Q. Will you please turn to page 25 of Exhibit 16-A. Will you describe the compressor station equipment which you say was priced for the nearest of size and type, when no equivalent was available? Have you already given us that?

A. I gave you that this morning, as far as I could go by memory.

Q. What check did you make to determine whether the price quotation you used in your estimate of compressor station equipment were the prices then paid for actual purchases in kind and quantity required of the Hope System?

A. First we asked the manufacturers to give such prices and we obtained prices from the manufacturers which purported to be that. We found that some manufacturers were giving us
640 lower prices than other manufacturers. This was particularly true as to one manufacturer, and we made very careful oral inquiry from that manufacturer by visits to his factory to find out whether or not the prices he was giving to us really reflected the price at which he was selling goods, and as a result of that extended investigation, we have every reason to believe that he was giving us prices that were actually in line with current sales prices. Furthermore, they are in line with our own experience in buying 50 thousand, 75 thousand horsepower of such equipment within the last ten years.

Q. What is the name of that manufacturer?

A. The manufacturer particularly asked us not to put in the record his name.

Q. Had the National Transit Company manufactured many of the compressor station units that were used in the Hope system?

A. A great many.

Q. And that is a subsidiary of Standard Oil of New Jersey, is it not?

A. No.

Q. Was it once?

A. It was once a part of the Old Standard group that was dissolved many years ago.

641 Q. Did you rely upon prices quoted by the manufacturer who is selling incognito here, whose prices were the lowest for compressor station equipment?

A. Where the prices he quoted were the lowest, we used them, but where they were not the lowest, I do not recall exactly where, but in some cases he was not the lowest, and I used other prices. In other words, I tried to get the lowest priced compressor station equipment that would be used in these stations.

Q. Did you check those quotations against actual purchases in the last two years?

A. The actual purchases of large compressor units are not sufficiently common. We have purchased a great many units ourselves, and the last purchase was some three or four years ago, of those large units, and I reached the conclusion that the prices that we had quoted and used on the units were pretty much rockbottom prices.

Q. For 1938?

A. For 1938 and 1939, and in most cases they were lower than the prices we had actually paid for the equipment which we bought.

Q. Did you consider the fact that much of the Hope Company's compressor station equipment has been substantially altered by the company since it was pur hased?

642 A. No. We priced all of the equipment that we priced at the prices of like equipment.

Q. When you say "like equipment" no such equipment exists.

A. By "like equipment" I mean if the company owned a four-cycle twin tandem gas engine with a 36-inch stroke, twenty-inch diameter of piston, I priced the engine at what it would cost for such an engine today without reference to who made it. I used the lowest prices available today for an engine of such a description. Details of manufacture may be different, but the engine is essentially the same engine.

Q. You mean essentially in performance, but it is really substitute equipment, is it not?

A. It being impossible to buy equipment such as now exists, without having to buy it made especially to order, I priced about what commercial equipment of the same description could be obtained for today; where I have no means of checking exactly the same size and dimensions, I took equipment that could be obtained today that was nearest in description to that which the company owned.

Q. The price quotations which you secured from manufacturers of equipment could not reflect the price of Hope's altered equipment, isn't that so

A. (No response.)

643 Q. Hope has made substantial alterations on some of its compressor station equipment, and when you get quoted prices for substitute equipment, they could not possibly reflect the cost to reproduce that particular equipment?

A. I am reflecting the cost of present-day commercial equipment of identical description. A twenty-inch or thirty-six inch stroke single tandem four-cycle gas engine is that whether it is made today or was rebuilt by the company.

Q. Did you price any of the engines on the basis of weight?

A. No, I do not recall of a single case where I priced them on the basis of weight, except to the extent of weight being a factor in freight. Engines not now obtainable as such are priced on the

price per horsepower of the nearest comparable equipment commercially available today.

Q. On page 25 of Exhibit 16–A, does the miscellaneous equipment which you stated was about one percent of the total include the machine shop equipment located at the compressor stations?

* * * *

THE WITNESS. The major machine tools, costing roughly $400 or more were specially priced. This miscellaneous equip-
644 ment of numerous small things like small grinders, related to machine tools or maybe a small drill press, as well as hand tools, as well as all kinds of odds and ends which comprise a very long list as related to any one station.

Q. Where did you get your prices for them?

A. The manufacturers of light equipment.

Q. On page 26 of Exhibit 16–A, in determining the cost of erecting compressor station equipment, did you give any consideration to the experience of the Hope Company at the time those stations were constructed?

A. No.

Q. It is true that the Hope Company actually erected compressor station equipment gradually, over a period of years?

A. That is correct.

Q. Would there not be a substantial lowering of the costs in erecting compressor station equipment in your three-year wholesale scale, as compared with the Hope Company's actual experience?

A. There should be no substantial difference, for Hope's whole costs were known. Our experien e in erecting equipment of this kind was compared by conference with the experience of the Hope men who had been erecting equipment and it was found that our man-hour experience for a given size and kind of ma-
chinery was reasonably in line with the company's own
645 experience.

Q. Do you mean that you adopted piecemeal experience for your wholesale construction estimate?

A. It is not piecemeal construction to erect all of the equipment in a given compressor station. The operation of that size is one that would generally be handled by the company's particularly skilled laborers and riggers, and the number of men employed in the company's operation is such that even the outside men they had to hire were well known workmen. That cost

by the company in building individual stations would be expected to be at least as low as the cost the contractor would be able to meet, even with the erection of a large number of stations on a three-year program.

Q. As a practical matter, though, you could build two compressor stations and completely equipment them in succession, for less than you could build one this year and one next year?

A. Somewhat less, but the labor cost in erecting equipment represents in the aggregate something of the order of five or six percent or thereabouts, so that it does not mean much money.

Q. On page 27 you referred to the installation of compressor station equipment by a contractor with an appropriate allowance. What is contained in that allowance?

646 A. The allowance amounts to approximately 8 percent of the contractor's whole field cost. Out of that allowance he must pay whatever gross income tax is required in West Virginia from him. He must pay any permits or licenses to work in West Virginia. Other than that he must take out his general overheads and set aside something to insure him against abnormal losses which occur from time to time due to unforeseen acts.

Q. Is that all?

A. I think so.

Q. Did you secure a bid from a responsible contractor for the installation of compressor station equipment?

A. No.

Q. How did you determine the assumed contractor's allowance?

A. This contractor's allowance of about 8 percent is the minimum allowance that the contractors look for in this contract work. They customarily, in figuring their costs, like 15 percent to cover the items for which I have allowed 8 percent, and I made my allowance, as in the other work, by contractors, as the minimum allowance for the general overheads and profits that a contractor is willing to contemplate in doing work.

Q. And how did you know that that was the minimum
647 allowance, that 8 percent?

A. The minimum allowance contemplated is arrived at from having let many millions of dollars of contracts and doing all kinds of construction work, as well as having made estimates of millions of dollars' worth of construction work where we ourselves had to stand the loss, if there was any.

Q. You say you have let the contracts?

A. I worked both ways.

Q. What compressor station equipment has been installed on the Hope system by a general contractor?

A. None so far as I know, excepting boilers that have been purchased, that have been erected by the manufacturer.

Q. Does the Hope Company carry on its pay rolls competent engineers and mechanics who are likewise competent to install compressor stations, and who make such installations?

A. Yes. The Hope Company has a nucleus of men who would do that. The men do that who handle the heavy major repairs on the equipment, that are required from time to time.

Q. On page 26 of Exhibit 16–A you state that the inventories were made, station by station, of the essential assemblies of valves and fittings, such as those required for high-pressure gas connections. Was that a physical inventory or an estimated inventory?

648 A. That inventory was made from the drawings available for most of the stations. The greater part of that pipe is not visible—it is buried, and we did not dig it out.

Q. If there are any errors in the drawings, those are reflected in the reproduction cost estimate?

A. Not directly so: We included in the bill of materials for these connections those materials which represent the company practice in connecting up of such equipment, which is in accord with the practice of the industry. If the company had in a thousand pound valve for three hundred pound service we made no allowance for that, but we made allowance for those major variations in the types of connections which affect the cost.

Q. Then you estimated the inventory?

A. No.

Q. You said some of it was not visible.

A. That is true, but there were available drawings. The connections between the compressor and the line pipe to who *who* knows compressor stations, are obvious. You don't know what make of valve may be underground, what make of fitting and would of necessity depend upon drawings, whether the fittings be screw fittings or welded fittings or whatnot.

Q. Don't the plant ledgers reflect the quantity of valves and fittings in each compressor station?

649 A. We did not go to the ledgers: we went to the drawings which showed the valves which were necessary in the operations of the stations. If there were any valves there that were not used, they were not shown on the drawings, and were accordingly omitted in this inventory.

Q. On page 26, you state that the cost of installing complex connection piping is based on experience. What experience is that?

A. Labor performance of erecting different kinds and sizes of fittings, and valves and so forth, has been rather well standardized. We secured from two large piping contractors, the standard labor performances, and we priced the labor costs of certain jobs which we had done ourselves, and in which we had completed detailed information, to find out what adjustments these contractors' performances—piping contractor performances were necessary to reflect the cost of piping of the nature which exists in compressor stations. We found the amount of that discount, and in all of our pricing we applied that discount to the labor performances these piping contractors say is necessary to install piping. Their figures are generally based on piping buildings that is up above the floor. In compressing station piping, most of the piping is about at the ground level at the time the station is built, and the discount below the customary performances reflect that fact, based on our experience in laying pipe for compressor stations.

650

Q. Did you study the Hope Company's experience in the installation of the complex nature of the piping?

A. The Hope's experience in that connection was not sufficiently detailed to be of any assistance to us.

* * *

663 Cross-examination (continued) by Mr. Springer:

Q. Mr. Rhodes, on page 27 you state that a separate allowance is made for the cost of hauling materials to each compressor station at average cost per ton reflecting distance and the kind of road. Are those average costs per ton based on a contract price?

A. No; they are based on the estimated cost of hauling materials, and the basis was the lowest ton-mile cost of hauling pipe.

Q. Was the cost based on experience, then?

A. All of the costs here are based on experience.

Q. Of the Hope Company?

A. No; on the experience of my organization, and as I said before, on the results of other people's experience, including, to a limited extent, the Hope Company's experience, but in hauling. Hope Company's experience appeared only to the extent of consultation with their operatives in their own work. The figures

are not exact figures based on Hope's experience, since they are not available over any considerable mileage of line.

Q. On page 27, what type of property do you include
664 under "Miscellaneous minor property?"

A. All of the other accounts than buildings, structures, gas wells, pipe lines, compressor station equipment and lands and rights-of-way. All other classes of property which, in the aggregate, only amount to three per cent of the total. Meters and regulators, for instance, shop equipment, general equipment. They cover the principal items.

Q. How did you price that miscellaneous property?

A. Using the same general methods as have been described with respect to other property. Items of property that were identifiable as such, for instance, as machine tools, not in the shops, or regulators, meters or fittings—they were all inventoried by making a check between the records in the offices of the company and the existence in the field of the particular things in question.

Prices were all obtained from manufacturers who were requested to give us the lowest prices available and the labor of installation was based, as in the case of compressor stations, on the same basic experience. Most of the equipment contained in these miscellaneous accounts is of the same general type as is contained in the major accounts.

For instance, valves and fittings involved in the meters required just the same method of treatment in pricing as valves and
665 fittings involved when they are in a compressing station. A lathe in the general shop is treated the same as a lathe in a compressor station repair shop.

Equipment like drilling and cleaning equipment, which of course is not a thing which is erected, is priced at cost delivered to average destination.

Q. Did you receive manufacturers' quotations on the drilling and cleaning equipment?

A. We did. In fact, the pricing of drilling and cleaning equipment, which is a very complicated system, was actually done for us by one of the most prominent dealers in that equipment, based on their current sales prices.

Q. Who was the dealer?

A. I don't recall at the moment. I would have to look it up in the working papers.

Q. You said he was the most prominent?

A. One of the most prominent. I think it was the Oil Well Supply Company.

Q. On page 28, why did you not use reproduction cost of land instead of cost to reflect what you term "current value" in your reproduction cost new estimate?

A. In the first place, you cannot reproduce land.

Q. Should it be included in a reproduction cost estimate then?

A. If it is properly marked for what it is.

666 Q. Then you do not have a reproduction cost estimate of land in a reproduction cost estimate of the system, do you?

A. This land—that is technicalities of words—but land is in here and it is clearly explained how the pricing of land was arrived at—the most important site being the office building here in Clarksburg, and it was carefully explained that this was all priced at the same price per acre as was paid for the neighboring lot which was purchased in July 1938.

Q. You used what are known as market prices for other items of property. Do you say now that you have used market prices for land?

A. Not in the broad sense that I analyzed real estate transactions throughout the City to arrive at a present value. In this particular instance, there was a parcel of land contiguous to the existing parcel, almost the same size, that faced on the same two streets. Whether that was a market price or not, it was the price the company actually had to pay for the land, and I deemed it to be an appropriate measure of the current value of the entire lot.

Q. Wouldn't you be consistent if you took the price paid by the company for other items of property?

A. No; because this was a recent thing. It is the only transaction in the neighborhood that was available, and that was used. I might have used book cost of land, but I deemed

667 it more appropriate in cases where I had more recent information as to the prices paid for land, to use the more recent prices.

Q. The land in the Hope system has not been purchased within the last two years, has it?

A. That particular parcel which I used as the guide for the current value of the office building site was purchased in 1938.

Q. For an addition to the office building?

A. That is correct.

Q. Would any other tract of land have been as satisfactory?

A. I don't think any tract could be quite as satisfactory as an abutting tract of practically the same size as the one involved.

Q. Was there a house on the first tract of land that was demolished?

A. Which tract do you refer to? The one which was recently purchased or the original tract owned by the company?

Q. The one that was recently purchased.

A. Yes; there was a house on that.

Q. And what adjustment did you make for that?

A. None whatsoever. The tract of land was brought for the purpose of building an office building, and it was known
668 that the house would have to be demolished and is properly a part of the cost of land and is customarily so considered.

Q. Was the building on the lot a part of the consideration, do you know?

A. I know only that they bought the land on which to build the office building, and tore the house down not very long afterward.

Q. On page 28, you state the Hope Company owned rights-of-way for which no payments were made. In your reproduction cost estimate, do you assume that payments would be made for those rights-of-way?

A. I assumed that they would be obtained free as they were obtained, mostly being rights-of-way that were included in the leaseholds.

Q. You also state that the company owned rights-of-way aggregating 180,125 rods for which no payments were made. Will you please turn to Exhibit 16-B page 6, and explain the difference between the 180,000 rods and the 252,000 free roddage grants shown, using round numbers?

The WITNESS. On page 6 of Exhibit 16-B, 252,911 rods is a balancing figure, so that the sum total of the roddage
669 is equal to the total roddage of the pipe lines. The 180,000 rods, I cannot specifically name without reference to the working papers. It may be cases where there were specific grants of rights-of-way for which no charges were made, whereas the 252,000 includes such specific grants as well as those which are incidental to leaseholds.

Q. Would you be able to furnish the explanation later?

A. I would be glad to.

Q. You state that the Hope Company, page 28, of Exhibit 16-A owned 980,655 rods of purchased rights-of-way. Please turn to page 6 of Exhibit 16-B and also to page 14 of Exhibit 16-D and explain the difference between the apparent total of 992,501 rods.

A. I would have to look up the working papers to find the source of the differences. In the text, the figures are given for illustrative purposes, and in the priced inventory, they are based on actual figures, but they can be reconciled and I would be glad to do so.

Q. There is a difference of 12,000 rods between the detail which you show and the text figure. That is so, is it not?

A. That is the approximate difference, yes.

Q. You might have included the rights-of-way on the coke oven gas lines?

A. Not intentionally.

670 Q. On page 29 of Exhibit 16–A, you state that the average cost per rod of the present trunk line rights-of-way was taken as the measure of reproduction cost. Does this average cost include the cost of clearing rights-of-way?

A. It does not. It is the payment to the farmer for the right to build the line across his land, plus the damages paid to the farmer, plus the cost of securing the paper, and so forth, but there is no clearing of the rights-of-way included.

Q. In what account did you include the cost of clearing rights-of-way?

A. As a part of the cost of constructing the pipe line, under which activity it is incurred.

Q. Is that in accordance with the uniform system of accounts prescribed by the West Virginia Public Service Commission for gas utilities in 1939?

A. I do not recall the details of that particular account, but I have included the cost of clearing as a part of the cost of the operation under which it is performed.

Q. Does the cost of the rights-of-way vary with the size of the pipe line constructed?

A. In general, yes; but the company's record of experience did not permit that determination without an unwarranted amount of work. We found the company's records were

671 relatively clean-cut, as between trunk lines and field or gathering lines, and we studied them separately and arrived at the unit costs which are set forth in the priced inventories.

Q. On page 30 of Exhibit 16–A you list the components of your undistributed construction costs. Can you translate each percentage into the respective dollar amounts of your reproduction cost new estimate?

A. Such a translation is a mere matter of arithmetic. These percentages, however, were first agreed to in the former Cleveland cases, and used by the Ohio Commission. I merely adopted them in the aggregate.

Q. Did you make any check to see whether they were proper in your reproduction cost new estimate in this case?

A. Yes.

Q. What kind of check?

A. I made two kinds of checks. In the first place, I compared these allowances with actual experience in the construction of properties with which I have been closely associated, which were built by newly organized, independent corporations, rather than by large operators in the business, and I found as a result of those checks that the aggregate amount of the first four items, namely, preliminary organization expense, engineering and superintendence during construction, administrative and legal
672 expenses during construction, and taxes during construction, I found that in the aggregate these agreed rather closely with my own experience, but were rather lower than the figures which I had available from that experience. ——

* * *

Now, the matter of interest would not conform to the particular experiences of mine because none of them extended over a three-year period.

The other sort of a check that I had been making is evidenced in another exhibit, where the actual cost to the company of building its properties was determined, and it was found in recent years that the administrative costs which included the usual administration of the property in its operations and construction, plus the supervisory of the top portion of the engineering, averaged about 6 percent, exclusive of taxes.

That check of the company's experience in the actual administration of its affairs, combined with the experience in the actual construction of new properties by independent corporations, confirmed me in my belief that this 9 percent for the four
673 items mentioned was a fair and reasonable allowance which probably would be exceeded in actual practice.

By Mr. SPRINGER:

Q. Now, translating the preliminary organization expense which you have assumed in your estimate of 5 percent, into dollars, roughly would that be $403,000?

A. Roughly, yes.

Q. Now, translating engineering and superintendence during construction, which you have assumed to be 4.5 percent, translated into dollars, would that be $3,631,000?

A. Substantially.

Q. Translating administrative and legal expense during construction which you have assumed at 2 percent, translated into dollars, would it amount to approximately $1,614,000?

A. Approximately.

Q. And the taxes during construction, you have assumed at 2 percent, approximating $1,614,000?

A. The figure is correct, but I did not assume the percentage.

Q. Interest during construction, you have used 8 percent?

A. That is correct.

Q. And translating that into dollars, it approximates $7,100,000?

A. Approximately, yes.

674 Q. Please state the items which you assumed would comprise preliminary organization expense, giving the dollar amount allocated to each item.

A. I have made no assumptions or no break-downs in detail of these totals. As I have explained, I used those which have been previously and repeatedly used in connection with the properties, which I found were in accord with my own experience. I made no break-down except in a study which I made of the properties, with which I was familiar. The details or such as were available, were broken down and classified to fit the set-up of this reproduction cost new.

Q. Can you list the items that ordinarily go to make up the preliminary organization expense?

A. Starting at the beginning, there is generally an investigation of the project to determine its feasibility. It includes investigation from the economic standpoint, from the geological standpoint, and from the legal standpoint.

Following that preliminary investigation, if it is promising generally a more extended investigation is made. If the project is still worthy of consideration, then a corporation is usually organized, which involves legal expenses, and the expense involved in actually forming the corporation. I am talking now from the standpoint of the things done, rather than from the accounting standpoint, because remember, I do not neces-

675 sarily subscribe to this break-down here.

Q. You used it in your estimate?

A. No, I did not. I specifically stated that I used the aggregate allowance as being proper.

Q. In your mind, didn't you use the customary components of preliminary organization expense, engineering and superintendence, administrative, legal, taxes and interest?

A. Only in a general way. It has been my experience in construction of these properties, that it is almost an impossible task to divide the expenses accurately as between these various classifications.

Q. Yes?

A. For instance, in the construction of the Southern Natural Gas Corporation, which I described yesterday, my time was divided between engineering and general executive engineering supervision of the work, and also the executive supervision of all of the corporate activities other than those having to do with relations with public authority and with the bankers. All of the accounting was carried on under my direction.

The question arises then, how should my time be divided, which is between engineering and administrative expenses? I had men working for me in dual capacities. Some of the men that were really a part of this purely corporate organization for handling public relations work, worked for me parts of the time and part of the time they did not, so that it is very difficult to divide the costs, even as they are being incurred, between these various classifications of engineering, preliminary and administrative.

676

And I have found that to be the case in the actual operation of constructing the properties. The principal job is to get the property built as cheaply as possible, and the accounts are not kept in a manner during construction periods to facilitate the making of estimates of this kind in any detail.

Q. Do you have any difficulty in relating such costs to direct costs?

A. That generally also requires special thought to compare with an estimate such as made here where the construction—miscellaneous items enter into construction cost, like purchasing, for instance, are included in construction costs. It is necessary generally to separate portions of the cost which may be incurred as a part of your office expenses that should be charged properly to construction.

For instance, on the Southern Natural Gas, there was a considerable amount of construction work, possibly of the order of $1,000,000, which was carried on directly under my supervi-

677 sion, where a defaulting contractor's work was taken over in part, and for building meter stations and things of that nature.

Some portion of my time might be charged to construction, but there is no way of positively arriving at it and even if a decision were decided to try to keep your accounts straight it would necessarily be an arbitrary division of the time of all of the men who were doing work of an administrative nature that was related to the various and sundry activities that were going on simultaneously.

Q. Do you know the cost by classes of property in the 1931 East Ohio-Cleveland rate case, from which you have borrowed these indirect cost percentages?

A. These figures were taken from signed agreements.

Q. Do you know what costs were included in the classes of property to which these percentages were applied?

A. These percentages were applied to all property except leaseholds and working capital.

Q. You don't know what costs were included in the classified property accounts to which these percentages were related, do you?

A. I don't recall the figures; no.

Q. Do you know the class of costs of the property to which the percentages were applied?

A. They were applied to the estimated cost of reproduc-
678 ing substantially the same property that now exists.

Q. Do you know in the 1931 Cleveland rate case whether Workmen's Compensation insurance was included in the classified property accounts?

A. I am quite sure that it was, but I would prefer to look up the records of that particular estimate.

* * *

Q. Do you think, Mr. Rhodes, that preliminary organization expense should apply to operating automobiles?

A. These percentages, if you use them as such, are for the purpose of spreading the costs over the various classes of property, and if any attempt is made to say that this item of expense applies to this item of property and not to that item of property, one would arrive at the most tangled mazes of impossibilities that could be imagined.

Q. Perhaps you started with an amount of money then and spread it on percentages that you thought might be fair?

A. Experience starts with the amount of money that is to be spread over the prime cost, which is also an amount of money, and it is turned into a percentage which we use, in the practical preparation of these estimates.

679 Q. How were you able to determine the proper percentages for overheads, without knowing the amount in the classified basic properties to which the overheads are applied?

A. That question has no meaning to me.

Q. Don't you have any relation between overheads and direct costs?

A. In this way we do. Direct cost could be set up in such a way that there would be nothing contained in them whatsoever except payrolls and checks paid to manufacturers of equipment and supplies. Then you would have a statement: "Here is material paid for to the manufacturers at so much, and here is labor paid for to the workman at so much, and everything else is overhead."

You could make an estimate that way if you wanted to, but in choosing the percentages of overhead to be used, the estimator must have clearly in mind the line of demarkation which I have had in this case, and in comparing my own experience, I have made the same line of demarkation between the prime costs and these overheads, as has been made in the estimate of the reproduction cost of this property.

Q. And I assume that is the same formula that was used in the Cleveland case?

A. Substantially the same formula, but I base my judgment as to the reasonability of these overheads upon my own experience.

679-A In the former Cleveland case, it was assumed that the lines would be built by the company at higher wages paid by the company than contractors paid.

Q. Is it true that the percentage for engineering and superintendence during construction decreases as the cost of the project increase, particularly when the project is based on large units?

A. To some extent it does.

Q. Mr. Rhodes, as an engineer, would you design and construct the Hope system as it exists, if you were retained to build the system now?

A. What would be built now is a matter of the substitute property as a whole. I am really concerned with the engineering cost of designing the property substantially as it exists, within

the limitations of the commercial availability of materials and equipment.

Q. Is the Hope system the most modern and complete system that could be built today?

Mr. COCKLEY. I object to that. That is not proper cross examination and it is not a proper question to ask of any witness.

The TRIAL EXAMINER. Read the question.

(The question is repeated.)

Mr. COCKLEY. I suppose it is true that each year, if you
679–B were to reproduce a property and wanted to put in all of the latest wrinkles and so forth there is not a year that goes by that you could not make a little change here or there or what-not.

The TRIAL EXAMINER. Do you have any objecion to the witness making that statement?

Mr. COCKLEY. No, but it seems to me that we have wasted enough time.

By Mr. SPRINGER:

Q. You concur in that, don't you, Mr. Rhodes? You concur in Mr. Cockley's statement?

A. I concur in what Mr. Cockley said.

Q. Is not the engineering and superintendence during construction of oil pipe line properties comparable to that required for the construction of natural gas pipe line systems?

A. When built in properties of comparable magnitude, yes.

Q. Do you know that the Bureau of Valuation of the Interstate Commerce Commission and the major oil pipe line companies use less than one quarter of your figure of 4.5 per cent for engineering and superintendence during construction?

A. No, I don't know that. But there again it is a question of how much on the engineering is charged directly to the construction, as it is on the Hope's own books, and as it was
679–C in the case of the properties which I have constructed.

I have extracted the engineering charged directly to construction and grouped it together as engineering. It is quite customary in building properties, for the sake of simplicity in accounting, for instance, when surveyors are out locating the line, to charge their time and their automobile expenses and so forth to that particular line, and when inspectors are out inspecting construction on that line, to charge the time to the line. And the same in map making or making the drawings necessary.

What may have been the elements of cost included in the prime costs by the Interstate Commerce Commission I do not know, but I do know that you cannot design, supervise the construction, and inspect the construction in pipe lines for a quarter of this figure that is given here, and I have designed and constructed thousands of miles of it.

Q. Do you know that the Bureau of Valuation of the Interstate Commerce Commission uses 1½ per cent for all overhead, exclusive of taxes and interest?

A. No, sir.

Q. Do you have within your knowledge the approximate investment in pipe lines in the United States?

A. I do not recall.

* * *

679-E Q. On page 30 will you state the components of your assumed administrative and legal expense during construction?

A. Again, without considering the exact accounting definition of various classes of work assumed, the administrative expense would include elective officers, as the president, vice president, secretary, treasurer and assistant treasurers, and so forth, and in the case of an operating property, it would include all the expenses incurred by and on account of these particular men. These particular men would be assisted by a staff of assistants considerably greater than the staff that is required during the operation of the properties. The accounting department, for instance, would be much bigger, because the volume and the amount of the transactions are greater.

There would be legal expenses in varying amounts, depending upon the circumstances as they developed during construction. There would be printing and there would be telephone and telegraph and automobiles in the use of these administrative officers, in fact the organization to handle the corporate affairs, the administrative affairs, is very much similar to that of the later operating organization, being only very much larger.

679-F Q. Speaking of taxes during construction, what base did you use to compute those?

A. I made no computation. Taxes during construction as they may well be assessed in this State, could easily cause the total of these undistributed costs to exceed the amounts which we have used.

As previously stated I am subscribing only to the aggregate amount of these allowances as being the minimum that could be

incurred in the construction of property such as this property constructed in the manner which I have described.

Q. Does it include the sales taxes and excise taxes as well as property tax?

A. I have made no specific assumptions, but in connection with the sales tax or the gross income tax to be paid by contractors, that comes out of their allowance, and is not included in here. I have made no specific estimates to the amount of taxes that might be incurred.

Q. Taxes are not assessed until the property is completely constructed, are they?

A. As a rule they are, depending upon the customs of the State in question, and I am assured by the attorneys of the company, that in the event of the reproduction of this property, taxes would be most certainly assessed on parts of the property that
679-G were in existence on the tax dates, whether they were in operation or not.

Q. Under your assumed three-year construction program, would properties completed and assessed on a tax date be considered available for operation also?

A. In some cases yes; but in most cases no.

Q. Why not?

A. Because in some cases, property would be exatly ready for operation on the date of taxation. I am informed in that particular case, whether the taxes should be charged to operation or construction is quite a question. If the taxes were assessed the day before operation began, would that be taxes during construction or otherwise? I have made no attempt to estimate it. It is the most complex estimate and again, as I said, it may well reach the point which would make the total of these allowances exceed the overall amount which I have subscribed to and used.

Q. Such a detailed program has been undertaken in the reproduction cost new estimates, has it not?

A. Not by me.

Q. Do you know of one instance where the Hope Natural Gas Company has paid taxes during construction?

A. No.

Q. You did not make a check of the constructed natural gas companies comparable to the Hope system, to determine
679-H what percentage of taxes during construction were actually paid?

A. There are no natural gas systems comparable to the Hope system, that I know of.

Q. There are none with that amount of investment?

A. No—but there are none with the complexity involved in the Hope system.

Q. Did you make any check of actual experience in the payment of taxes during construction?

A. The experience that I have had as to taxes during construction indicates rather less taxes than would be likely assessed in the east. Most of the construction that I have handled has been in the less thickly populated territories, where the tendency to tax property during the construction period is much less than it is in this part of the country.

Q. You have used other persons' knowledge for your basis?

A. No. I find that in my own experience with the smaller taxes that have been paid, the average aggregate amount of these undistributed construction costs is greater than the amount included here including taxes.

Q. Is it not customary to build pipe lines in the summer and the tax dates are usually in the winter, are they not?

A. I think so: yes.

679-I Q. On page 30, for interest during construction, you have used an 8 per cent figure. What rate of interest did you assume in determining your allowance for interest during construction?

A. I assumed no specific rate of interest. The 8 per cent may be, in fact it is the composite result of a great many factors. If as is sometimes assumed, that the average time that money would have to be hired during the construction period was half of the construction period, that would mean that the money would be required for one and a half years, in which case 8 per cent interest during construction would be the result of a rate of about something over 5 per cent.

On the other hand, it is always necessary in constructing property by an independent corporation, without the benefit of a large operator, to borrow a great deal of money in advance of actual construction. In one case with which I am personally familiar, all of the money was made available before a dollar was spent for construction on a project that took 17 months to construct. If that were the case here, the 8 per cent might be for three years' use of the money.

On the other hand, a more common requirement is for from three to six months supply of money as being necessary to sat-

isfy the requirements of the bankers, and to establish
679-J the credit of the company.

That three months added to the one and a half years average time that might be required, would give a total period of 21 months, in which case something like 4½ per cent rate of interest would give you the final result of 8 per cent. Or, the property might be constructed in such a program that parts of it would go into operation a year or so after the beginning of construction, and some parts would be constructed well in advance and carried for considerable periods before they could go into operation, through natural limitations, so that it may be that the average time the money was used during construction would be a year in a project like this, plus the three to six months for the supply of money that it is necessary to have in advance, in which case the period that the money would be used would run from fifteen to eighteen months, in which case again, five or six per cent interest during construction might be required—and might give you the 8 per cent. Or you might be so fortunate as to be able to get your money in such a way that you would only have to hire it a year before you are able to begin operations, and then it would take an eight per cent rate of interest to achieve the eight per cent cost during construction.

All of those factors affect one another, and some of them act in one way and some the other, and the conclusion that
680 I have reached, after consideration of all of these facts, is that on a property such as this to be constructed over a three-year period, the interest during construction may fairly be taken as 8 per cent.

Q. Did you assume that this property would be constructed as a completely independently and publicly financed utility?

A. I did.

* * *

Q. Mr. Rhodes, did you make a study of what the cost of money would be under that assumption?

A. No; I did not.

Q. And I believe you did not state that you assumed any specific rate of interest to be used in the time of interest during construction?

A. That is correct.

Q. Mr. Rhodes, are the overhead percentages on page 30 of Exhibit 16-A the same as are used in the company's original cost exhibit, which I understand will be presented in this case?

A. No; they are not.

Q. Then you did not employ the Hope Company's expe-
681 rience to your estimate?

A. No; the Hope Company has the benefit of other experience, for which the Hope Company pays nothing and receives services from others for which Hope pays nothing. An independent company has to pay for all of those services.

Q. The company you have assumed would have no free services?

A. That is correct.

Q. And that is the only explanation for the difference between the overhead percentages you have used and the overhead percentages appearing in the original cost exhibit to be presented?

A. No. In determining the true original cost of the property, the overhead percentages to be used must necessarily be those that are reflected on the company's books. There is no way of reflecting the free services which they get. In the reproduction cost new, I have made my estimates on the assumption that nothing will be obtained free but everything must be paid for at the market price, or its equivalent.

Mr. Rhodes, did you list the free services which Hope Company receives?

A. Well, during this construction period, for instance, when money was required actively in large quanities, the money
682 was advanced as required, and no more than a nominal rate of interest was charged on the advances.

In many cases, Hope constructed its properties out of its own cash. Operators in the natural gas business, the large operators have had experience all over the country, and while the parent company in this case has made charges and does make charges from time to time, to Hope, those charges include bare out of pocket costs that are incurred by the parent companies that are readily discernible, without any charge whatsoever for the knowledge and production power that makes it possible for them to carry out these projects.

I know from experience that these so-called "overhead costs" are less when the owner of the project is a large operator.

Q. Mr. Rhodes, will you please refer to page 34 and 35 of Exhibit 16–A. On page 35, your estimate shows $14,296,600 for undistributed construction costs. Will you state the application of those costs to each of the accounts listed on pages 34 and 35?

A. I made no such application except to the sum total of all of these costs.

Q. On page 34, Mr. Rhodes, account No. 330-1, Natural Gas Producing Lands, did you apply overheads to that?

A. Yes; I have spread the overhead over all of the expenditures because that is the manner in which I have learned
683 what percentages are required to cover all of the expenses of the company.

Q. Account No. 330-4, Rights of Way, did you apply overheads to that?

A. Not specifically, but as a part of the aggregate costs of the property, yes.

Q. Account No. 330-5, Other Land and Land Rights.

A. The same answer.

Q. Account No. 334—Drilling and Cleaning Equipment. Did you apply overheads to that?

A. The same answer.

Q. Account 337—Other Production Equipment?

A. The same answer.

Q. Now, on the Transmission Plant account, 351-12, Land, you made the same allocations?

A. I have made no allocations. I have merely applied the allowance percentage to the sum total of all of the construction. I have made no attempt to spread it over details.

Q. That would be true of account 354-4—Other Transmission System Equipment?

A. That is right.

Q. And under General Plant Jointly Used, on page 35, Account No. 370—Land and Land Rights, the same is true there?

684 A. Yes, sir.

Q. Account No. 372—Office Furniture and Equipment? The same answer?

A. That is right.

Q. And the same for all of those except Account 378—Communication Equipment, listed in the general plant, jointly used?

A. I applied one overall percentage to the sum total of all of the prime construction costs.

Q. Was there a separate calculation made for interest during construction?

A. Not for the purpose of arriving at the sum total. It may have been made in the working papers as an incident but not as a part of getting the final answer.

Q. Mr. Rhodes, on page 35, you captioned the account, General Plant Jointly Used: Does that mean that that plant is used by Hope with other companies?

A. "Jointly used" refers primarily to property that is used jointly with the distribution department.

Q. Does Hope Construction and Refining, River Gas Company and Reserve Gas Company, as of the date of this exhibit, use any of the plant listed under "General Plant Jointly Used?"

A. I don't know the extent to which such use is actually made. I do know, however, that charges are made by Hope to
685 these companies for administrative costs, which cover any use that might be made of the building by those companies.

Q. No segregation of the property used by other companies than Hope appears in your exhibit?

A. No; there is no segregation.

Q. Mr. Rhodes, has the Hope Company charged to expense the items you list on page 30 as overhead?

A. They have in the past failed to charge them to construction, as they should have done, and are now charging them all to construction.

Q. But in the past they have charged those to expense, have they not?

A. In effect; yes, sir.

Q. And then, is there not a duplication in these overheads, if they are placed in new reproduction costs in an estimate that might enter into the determination of a rate base?

A. Not if the rate statement properly reflects the fact.

Q. There will necessarily be an adjustment, will there not?

A. The rate statement must necessarily reflect the charging to construction of these items of expenses.

Q. In your reproduction cost new estimate, Exhibit 16-A
686 to I, inclusive, you reproduced all of the property of the Hope Company?

A. No.

Q. What have you excluded?

A. Property used solely for distribution of gas.

Q. Could you list that property now?

A. I think it is adequately listed in that statement. I have made no separate listing of the property used solely for distribution.

Q. Then your exhibit includes all of the property owned by the Hope Company, other than what you term "used in distribution?"

A. All of the physical properties. It does not include securities and things of that nature that it owns.

Mr. COCKLEY. And it does not include leaseholds?

The WITNESS. No; that is correct.

Mr. COCKLEY. And the coke oven gas plant?

The WITNESS. Furthermore, it does not include working capital in the form of stores, materials and supplies.

By Mr. SPRINGER:

Q. Is all of the property which you classify as natural gas production plant used in rendering services in interstate commerce?

A. To some extent.

687 Q. Do you know the principal use of it?

A. The principal use is for the production of gas for export from the State of West Virginia.

Q. How did you determine that? Did you make a flow study?

A. You do not need to make a flow study. It is perfectly obvious that with so many billions of cubic feet of gas being measured at the Ohio River with the pressures as I know them to be lower on the other side of the river than they are on this side of the river, that that amount of gas went out of the State of West Virginia. I know the same thing is true, that the Brave station for delivery to People's Company, it is fairly obvious from the location of the meters, what gas goes out of the State. It requires no flow study to accomplish that result.

Q. Do you know what property is used in rendering gas service in interstate commerce?

A. Not specifically.

Q. What was the basis for your exclusion of what you term distribution property?

A. Gas distribution property is not used at all in interstate commerce. It is purely within the State of West Virginia.

Q. How did you determine that?

688 A. It is obvious.

Q. Is it?

A. Yes.

The TRIAL EXAMINER. How did you determine what particular properties were used for that purpose? That would not be obvious, would it?

The WITNESS. It is obvious that the distribution mains in the City of Clarksburg are not used in interstate commerce at all.

Similarly the distribution mains in Parkersburg or in Weston or the shops in those particular towns that have to do with the distribution meters—that is property that is solely used in the distribution of gas, and must necessarily be wholly within the State of West Virginia.

Q. Then did your exclusion of what you call local distribution property end at the city limits? How about the feed lines for local distribution property?

A. Those feed lines for local distribution properties may be transmission lines or they may be in fact field lines, depending upon where the gas goes in the line that is delivered to the city gates.

Q. Did you make a study to determine that classification?

A. I made no study to determine what little lines here and there around the system might be solely used to deliver gas to individual consumers.

689 Q. Do you know the use made of the long line from Sheriff Meek's station to Richmond?

A. It is used to transport gas to Richmond.

Q. For local distribution?

A. Yes; that is local distribution.

Q. And is that included or excluded in your reproduction cost estimate?

A. That is included.

Q. Included?

A. It is.

Q. Is any of that used for gas service in interstate commerce?

A. It is impossible to make a segregation except in isolated instances, of property that is used solely for one thing or solely for the other. With very few exceptions, and that is one which you have mentioned, the transmission properties of the company are used jointly to a relative indeterminate extent for the export business and the local business.

Q. Are you prepared, Mr. Rhodes, to state the extent and purpose of the use of each unit of property you have included in your reproduction cost new estimate?

A. In the broad aspects, I know what all of the property is used for. When it comes to the use of some insignificant piece of property, my memory probably would not serve, but

690 I am familiar with the use of the property in this system, and the manner in which it is operated.

Q. Did you make a study or was there a determination of the usefulness of the property you have inventoried given to you as the basis for your estimate?

A. When the field inventories of this property were made by me, I was supplied by my men with a list of items of property concerning which they needed further information as to their use. Those items of property were brought in to me and I considered these items and discussed them with the management of the company. If they convinced me that these items of property were used and useful, I included them in the reproduction cost new, and made no special consideration of them when I determined depreciation. If I disagreed with the management, in reproduction cost new less depreciation, in general I depreciated the reproduction cost to the warehouse value of that equipment, for movement to some other location as it might be needed. There was very little property concerning which there was any question as to its usefulness.

Q. You were convinced that most of the property was used, were you not?

A. I was, and I made other analyses to determine whether it was used.

Q. Could you list the property that you eliminated as
691 not used or useful?

A. The working papers show it. There are a number of items wholly unimportant in the aggregate.

Q. You state on page 11 that the items of property covered by your reproduction cost new estimate has been classified in accordance with the 1939 West Virginia System of accounts. You know that system of accounts has a functional division of utility plant accounts, entitled "Storage Plant" do you not?

A. There are two questions you have asked me. My answer to the first question is that this classification was made by the company.

The second question as to storage plant, I know that there are certain wells of this company that are filled up with gas in the summer and from which gas is withdrawn during the winter. Whether those are properly classed as storage plants or wells, as they are classed in this reproduction cost new, is a matter that have been determined by the management of the company as the proper classification of this character of property.

Q. Then you have reproduced as active producing wells, storage property?

A. I have called as active producing wells these wells which are filled up in the summer and actively drawn
692 upon during the winter. They are not just idle storage wells at all: they are used in very important functions of carrying the peak load such as we had last January, and without which, I think, there would have been a serious shortage of gas.

Q. Without a classification in accordance with the West Virginia System of Accounts?

A. Quite aside from how they might be classed, they are not idle property; they are active property, that are more properly determined as to cost and value as wells than they are as storage holders, which of course they are not.

Q. Do you have in mind the names of the pools which are used as reservoirs?

A. Primarily, the Bridgeport pool is the principal place where gas can be stored in the summer and withdrawn in the winter. I know that other operations are now being carried on experimentally.

Q. Do you know of any other reservoirs used, as of December 31, 1938?

A. I do not recall any other reservoirs in active use for the purpose.

Q. Will you please turn to Exhibit 16-B on page 2. You have summarized there the natural gas producing lands owned by the Hope Natural Gas Company in the amount of $2,275.

A. Yes; I have.

693 Q. And the page following that, are those lands owned in fee or are they interests by lease?

A. I have not examined the deeds, but information was furnished to me that that is land that is actually owned in fee, the use of which is shown on page 3 of Exhibit 16-B.

Q. Does the amount which you have set out opposite each parcel of land represent your estimate of the present market value, or does it represent the actual amount paid by the Hope Company?

A. It represents the original cost before the application of overheads.

Q. And you have captioned it "Value?".

A. Yes.

Q. Is any of the property listed on page 3 used in rendering gas service within the State of West Virginia?

A. It is used jointly with other property in rendering service within and without the state.

Q. On page 6, you show a summary of field and trunk lines, rights of way, in the amount of $772,814. On the field trunk lines, you have used a unit cost of $1.75 per rod. On the field gathering lines you have used .95 cents per rod. Do you have your working papers here now?

A. I do not. The working papers that we were bringing here, I might state were for unit cost development. I am
694 not sure that those particular working papers would appear in the unit cost development or in the general working papers, which is a stock as high as this room.

Q. Can you tell us how the unit cost was developed?

A. I can. I had a study made of the cost per rod of all rights of way purchased by the company which still exist. These costs were classified in the records which were available to us as between trunk lines and gathering lines. No attempt was made, on account of the volume of the work involved, to segregate any of these lines as between sizes, that not being necessary, as the basic information was the cost of the rights of way still held.

It was found that in the early period of the development of the company up to about 1910, the costs were low and growing.

From 1910 up to 1930 when the depression struck us, the costs were fairly reasonably uniform, from five year period to five year period, and beginning with the depression, when people were no longer buying rights of way, the cost per rod began to fall quite rapidly. It was in accordance with my own experience in buying some thousands of miles of rights of way that the greater the activity in buying the rights of way—the shorter the time you had to buy 100 miles, for instance, the more
695 you are going to pay for it, and based on those experiences of my own and the company's experiences in the twenty-year period of active development, I arrived at the unit costs separately for field trunk lines and gathering lines, which I rounded out to the nearest five cents per rod, which is as close as it can reasonably be determined.

Q. How much is in that $1.75 unit cost for the rights, and how much for acquisition, and how much for damages?

A. I have made no attempt to break down the total original cost. The original cost working papers which serve as the basis for these figures will disclose all of the information that is available. In the actual purchase of rights of way we do not,

in our own thoughts, distinguish as between the price paid for the right of way and for the damages. The division is often arbitrarily made to suit the ideas of the farmer, or for other reasons, the division might be changed, so we think in considering the purchase of rights of way that it is going to cost is $1.00 a rod or $2.00 or $3.00 a rod as the case may be.

Q. Why should field trunk line unit costs be more than field gathering lines?

A. Because they are bigger lines is the prime reason, and they perform a more important function, which generally leads to the necessity of paying more for the actual rights of way.

696 Q. The rights are identical, aren't they?

A. No. A larger, wider right of way is required for the larger lines.

Q. Does not the Hope Company have a standard right of way form which is used?

A. I assume they do; I do not recall having seen it.

Q. And that would specify a uniform width right of way, I take it?

A. Not necessarily. In buying rights of way, the width is specified to meet the particular needs of the situation.

Q. Will you furnish the detail of the development of the unit cost?

A. To what do you refer?

Q. Of the $1.75.

A. Where the $1.75 came from or the details of my original cost working papers?

Q. If you will just furnish an example of how you built up that unit cost, that will be satisfactory.

A. Well, the unit cost is $1.75 per foot and that is the average price paid by the Company for all of the rights of way purchased from 1910 to 1930, rounded out to the nearest five cents per rod. It is just an actual division of the total dollars by the total rods, determined from the original cost working papers before the overheads were applied.

697 Q. Will your working papers reveal voucher reference and total rods and the money paid by Hope?

A. The voucher reference can be found only in the original cost working papers.

Q. You have listed on page 6 of Part B of Exhibit 16, 87 railroad crossings at a unit cost of $75 each. Does this represent the actual price paid to the railroad company for the privilege of constructing lines under their tracks?

A. The figure of $75 was arrived at by averaging the cost of a considerable number of railroad crossings purchased by the Company, and reflects the actual original cost before overheads. It includes not only what was paid to the railroads, but what other costs might be involved in securing the right to cross the railroads.

Q. Did your analysis cover the same period as the rights of way?

A. We used the same records.

Q. The same period?

A. The information was obtained at the same time that we obtained information as to the cost of rights of way purchased.

Q. Does it cover the same period of time?

A. I do not recall the exact period of time covered by the rights of way, but we studied information as to all of the
698 railroad crossings, of which we were able to find records, in the original cost development.

Q. Will you please turn to page 8. You have listed here a summary of "Other Land and Land Rights, Account No. 330-5," in the amount of $21,045?

A. Yes.

Q. And the details follows?

A. It does.

Q. Does each of the amounts for each of the items listed in this account represent the cost paid by the Hope Company for this property?

A. It represents the original costs before the application of overheads.

Q. And what do you mean by "original cost"?

A. The original cost is determined and reported on in a separate exhibit.

Q. And you have termed it "value" for the purposes of your study?

A. I have considered that original cost as the best available measure of the value of those lands.

Q. Will you refer to page 9, please, and the first item you have listed at the top of page 9 is land used for unloading pipe, valued at $749. Do you know where that tract of land is located?

699 A. Not without reference to maps, other than that it is located in Boone County.

Q. And do you know whether it is currently used?

A. As to whether it is used at the moment, I do not know, but it is used when active construction is taking place in that territory.

Q. Do you know the last time it was used?

A. I have not investigated it.

Q. Did you make a check to determine whether it was used during 1958?

A. I did not make such a check, no.

Q. You accepted the original cost from the books for the purposes of this study?

A. That is correct.

Q. Without making any investigation?

A. The original cost, as determined from the books.

Q. Without making an inspection of the use of the property?

A. I did not inspect the use of each individual piece of land or other property.

Q. You have listed under Harrison County, land used for dwelling sites at McWhorter. Do you know if that property was sold about a year ago?

A. No.

700 Q. And you have listed under Harrison County the use of land for warehouse, amounting to $302.

A. Yes.

Q. And you had that as .292 acres.

A. That is right.

Q. Isn't that approximately $1,035 an acre?

A. Approximately.

Q. Is that not a high price for farm land?

A. It is what the company had to pay for the land.

Q. And you think that is the market value of the land?

A. It is the best evidence of market value. I know from my own experience that when you want a particular piece of land you pay what the farmer wants and not what you think you ought to pay.

Q. There is another item on page 9. You have listed .037 acres comprising an office building—on which an office building at Bridgeport is located, at $1,203. That is approximately $35,000 an acre, isn't it?

A. Approximately.

Q. Do you know where that building is located and the size of it?

A. I don't recall. I know only that that is what the company paid for the land.

Q. Was it purchased from the Bridgeport Gas Company?

701 A. I don't recall the details.

Q. Do you know how much of that property is used in rendering gas service within the State of West Virginia?

A. No.

Q. Do you know that the major use is for local purposes?

A. No.

Q. On page 9 you have listed three pieces of property located at Salem Station. Is that the storage yard for the Salem district?

A. It could be so used. The extent to which it is so used, I do not recall in detail.

Q. Do you know how much use the Hope Construction & Refining Company makes of that storage yard?

A. No.

Q. Do you know that there is a gasoline plant adjacent to that?

A. Yes.

Q. And have you made any allocation between the use of property listed in your inventory by companies other than the Hope Company?

A. No. Any such use that is made of that property and is charged for, is reflected as a reduction in expense in the rate statement.

Q. On page 10, you have listed 19 acres used as Regu-

702 lator Dwelling and Pipe Yard, in the amount of $603?

A. Yes.

Q. Do you know where that property is located?

A. Not specifically.

Q. Are you sure there is such a property?

A. Such a property was so located in the determination of original cost, and it is reflected by deed No. 45,033 in the records of Harrison County.

Q. All through this statement you have accepted the inventory of men who made the original cost statement, is that right?

A. No. As to the things like land, yes, but the inventory used in the original cost statement was used as a basis for the inventory which was priced here. As to operating units of property, the units are identical.

Q. Will you please refer to the third item on page 10 and described as "Storage purpose at former Aizpuru Station." Do you know what that property is used for?

A. Storage purposes.

Q. Do you know what is stored on that land?

A. No; I have not seen it.

Q. Do you know that the property was purchased?

A. The original cost records show that the property was purchased and it cost $202 before the application of over-
703 heads.

A. Do you know that the property was abandoned?

A. I don't know whether it was abandoned or not.

Q. Would you please define the operating units of property to which you have referred.

A. I will refer to it by example. First, Line H-192 is an operating unit of property. I consider each of the compressor units, for instance, each compressor unit, as an operating unit of property. Each identifiable piece of machinery is an operating unit of the property. Per contra, I do not consider a valve in a pipeline as an operating unit of property. It is a part of a unit. A building is an operating unit, as I use the words.

Q. Thank you. Now, on page 10, will you refer to the item listed as "Warehouse and Office at Gilmer." Do you know what part of that property is used by the Hope Construction & Refining Company?

A. No.

Q. Do you know what part of the property is used in rendering gas service within the State of West Virginia?

A. No.

Q. Well, where could we get the answers to these questions?

A. From the management of the company.

704 Q. From the management?

A. Yes.

Q. There are not any other exhibits prepared by you which may be subsequently presented which show the use of the property which you have listed?

A. I have made no allocations of this property.

Q. Referring to page 10 again and the item "Storage Yard and Barn at Mannington," under Harrison County, do you know what use the Hope Construction & Refining Company makes of that property?

A. I do not.

Q. On page 11, Mr. Rhodes, in the item "Office and Storage Warehouse at Ellenboro" in Ritchie County, was that office in use on December 31, 1938?

A. I was not there on that day, so I cannot state.

Q. You have relief on someone else's statement, haven't you?

A. Of necessity.

Q. And you don't know whether it is there at the present time or not?

A. If I recall correctly, it was there a few years ago when I was in Ellenboro myself, but I did not pay any attention as to whether it was in use or not.

Q. And you don't know how much use is made of that
705 property by the Hope Construction & Refining Company?

A. I do not.

Q. Do you know how much of that property, as of the date of your exhibit, the Reserve Gas Company used?

A. I do not.

Q. You knew that Ellenboro was the central point for the Reserve Gas Company, didn't you?

A. No; I have not considered the Reserve Gas Company at all.

Q. The next items you refer to, Warehouse and Office at Littleton, in Wetzel County—do you know what part of those tracts are used by the Hope Construction & Refining Company?

A. No.

Q. Nor what part is used for the local distribution?

A. No.

Q. Then to summarize this whole account, you are not sure that those items of this account totalling $21,045 should be assessed against the operations of the Hope Natural Gas Company? Well, you have already answered that "No" in detail.

The WITNESS. I do know from my organization that these tracts of lands are owned by the Hope Natural Gas Company, and carried by it in its production land account and is
706 considered by it to be used and useful in its business, which is primarily the export. I do know that when my men went around examining the property they did not call to my attention any of this property as being doubtful as to use. Under those circumstances, I have relied entirely upon the fact that the property is Hope Company property and is used and useful to it in its business.

Q. Then if any errors were made by any of the persons on whom you have relief, it is reflected in your reproduction cost estimate as to the usability and usefulness of the property?

A. There are not necessarily any errors. The management considers the property to be used and useful, and on such insignificant items of property I did not consider it necessary to give

personal attention or give any particular detailed consideration of these small items, that might be left out without any measurable effect on the answer.

Q. But we have only covered one account. These insignificant items may become great in the final answer, may they not? It is conceivable, is it not?

A. It is inconceivable to me, being generally familiar with this property, that there is any considerable amount of money represented in any kind of property but what is fully used and useful.

707 Q. But you have made no allowance for what you call the insignificant portion——

A. (Interrupting.) I say there can be no aggregate amount of insignificant things that is an important factor in the total over-all cost of this property.

The TRIAL EXAMINER. Were your men instructed to call to your attention any items where they questioned the allocation of the items already made by the company?

The WITNESS. In general they were not instructed to question allocations. In some cases we did that, but in general their instructions were only to call attention to any property which they could not see was being used by the company.

The TRIAL EXAMINER. So that in general the allocation was made by the company and not made by you or your men?

The WITNESS. That is so.

By Mr. SPRINGER:

Q. How would you make an allocation in expenses and income relating to the property that is jointly used by Hope Construction & Refining Company and the Hope Natural Gas Company?

A. I have not made any such allocation.

Q. Well, it is necessary, to be consistent, is it not?

A. If charges are made for the use of property or for services performed by Hope for these other affiliated companies, those charges may well cover all of the services performed,

708 even the use of property. It is entirely consistent.

Q. But does it cover the use of property?

A. In the opinion of the management, it covers all of the services performed.

Q. Is there one person in the management of the Hope Natural Gas Company on whom you relied for the statement of whether

items of property were used or useful and the extent used by the Hope Natural Gas Company?

A. These points to which I called attention were generally settled in a conference which was attended by Mr. Tonkin, the president and Mr. Chisler, their treasurer, and sometimes their assistants.

Q. Will you please refer to pages 19 to 24, Field Measuring and Regulating Station Structures, 588 regulator and meter houses, and 1,481 free consumer boxes. Are any of these houses or boxes used in connection with regulating or measuring gas sold to consumers in West Virginia served from the field lines?

A. I have not investigated the detailed locations of these respective regulating structures. Necessarily they regulate the pressure of the gas passing from a high pressure line to a low pressure line, if they are regulators. In most cases they are meter houses.

Q. Will you turn to page 28, please. The first item
709 that you have listed there is the Bridgeport Office, which you show at $3,197?

A. That is right.

Q. You have indicated that this is a type 37 structure?

A. That is right.

Q. Are you able to give us the breakdown of the unit cost of the 23.6 cents per cubic foot?

A. Not as between all of the items entering into the construction of that structure. Type 37 structures are structures as described here in a general way. A group of the Type 37 structures were priced in detail, these structures containing different volumes in cubic feet, and from the average cost, or from the cost per cubic foot of the structures of various sizes, the appropriate price per cubic foot was taken for structures of intermediate sizes. It is well known that a small structure of a given type costs more per cubic foot than a large structure of the same type, and that is reflected in this pricing. The unit cost development shows the full details of how this price per cubic foot was arrived at.

Q. You do not have that unit cost development set of papers with you now?

A. I don't know whether it has arrived yet or not. I do not have it with me now.

710 Q. You could furnish us an example of the composition of that unit cost, couldn't you?

A. I could furnish you with an example showing just how that unit cost was arrived at.

Q. Will you be able to do that after the noon recess?

A. I will have one of my assistants determine that for me.

Q. How did you measure this Bridgeport office building? Did you take the inside or outside measurements?

A. Generally outside measurements are used in the measurement of a structure for determination of its volume.

Q. Were you consistent? Did you use outside measurements all the way through?

A. Outside measurements were generally used. I know of no exception.

Q. Do you know what use is made of the Bridgeport office in rendering gas service within West Virginia?

A. It is used as the office in the Bridgeport production district.

Q. Is it the accounting office for the City of Bridgeport?

A. I don't know whether it is in that building or not.

Q. On page 25, you show a unit cost of $0.214 per cubic foot for item No. 3, Office and Warehouse, Bridgeport, but for the same type of structure it Item No. 1, office at Bridge-
711 port, you have used a unit cost of $0.236. What is the explanation for that difference?

A. I have already explained that the large building costs less per cubic foot than the small building, if they are of the same type.

Q. That will explain any of the differences throughout this study, where structures of the same type but a different cost per cubic foot are shown?

A. That is correct.

Q. Do you know what use the Hope Construction & Refining Company makes of the structures at Bridgeport?

A. Primarily in the operation of the Bridgeport District for the producing of gas.

Q. I said the Hope Construction and Refining Company.

A. I beg your pardon. I don't know what use the Hope Construction Company makes of it.

* * *

713 Q. Will you please refer to page 30, and referring to Miscellaneous Improvements, $2,324, can you list for each structure the miscellaneous improvements, which you have added as an arbitrary 15 per cent to the cost of the structures themselves?

A. The working papers disclose the list of such details which if typed in a case of this kind with respect to each building would take pages of this typed matter for each account.

714 We set up the details which we had available, and to avoid that complication, we found that these particular structures by districts had differing amounts of miscellaneous construction about them, innumerable items, and that as related to this Bridgeport District we found that 15 per cent fairly represented the cost of those miscellaneous items. The details are available in all of the enormous volume of the working papers, if you care to examine them. The amount being small, we preferred to reflect the average practice of the Company in such matters, which, as related to this Bridgeport District is fairly represented by 15 per cent on the cost of the structures. It is an unimportant total amount which I say would have taken pages and pages of detail to price separately.

Q. We are just seeking an example of each one of these. We would not necessarily advocate the placing of the details in the exhibit, but we would like to know just how these are arrived at. Is it a coincidence that on page 30, Miscellaneous Improvements, priced at 15 per cent of the cost of the structures is the same as on page 35, Miscellaneous improvements, priced at 15 per cent of the cost of the structures for the different districts, Buffalo and Bridgeport?

A. We studied the details of these improvements, in order to avoid complicating the record with a lot of unimportant
715 detail, we found that these various districts might be grouped into classes which contained relatively few miscellaneous improvements, and other districts where they contained a considerable amount of miscellaneous improvements. We priced in detail two typical districts of each of the groups. The Buffalo District and the Gilmer District were priced in detail and showed over 17 per cent as to the cost of these miscellaneous improvements. They were put in the 15 per cent class with the other districts, the names of which I do not have available.

We found other districts, like the Calhoun and Mannington Districts had more of these miscellaneous odds and ends which totaled up to about 25 per cent, and we priced Calhoun and Mannington in detail and found that there was more than 25 per cent represented in these structures, and we used 25 per cent for Calhoun and Mannington, and others which we found had that complexity in miscellaneous details. Salem and Shirley were districts where there was a great deal of this detail, and we found that 45 per cent was a figure that fairly represented the cost of these miscellaneous structures in the Salem and Shirley districts, and others that came in that class.

The method that we arrived at for these percentages is as explained by me, and actually reflects the Company's practice in those miscellaneous odds and ends of construction,
716 but which, after all, represents a comparatively small amount of money.

Q. Do you mean 45 per cent of a piece of property would be miscellaneous improvements?

A. Well, in $100,000,000. worth of property, $5,000. worth of property in the Shirley district is an unimportant item, particularly when we used 45 per cent and found it was actually 45.2 per cent.

Q. How much does the miscellaneous improvements amount to in the aggregate of the valuations?

A. I have not figured that out.

Q. It is a substantial amount?

A. No, because these particular accounts to which it applies are quite unimportant accounts in the aggregate.

Q. Is it more than $100,000?

A. I have not the slightest idea how much it is, but I may say that the specific percentages we used were the percentages actually determined from the company's cost of property, and it was done that way to save space and save thousands of dollars involved in this infinite pricing of small items.

* * *

717 Q. Mr. Rhodes, will you define "unit cost?"

A. Unit cost is the cost of providing a unit of the particular thing or commodity involved.

Q. Will you please refer to page 4 of Exhibit 16-C.

A. I have it.

Q. Will you please describe the detail development of unit cost of .771 dollars for 6⅝-inch nominal diameter, South Penn casing, weight 20 pounds per foot, of which there are 4,553,783 feet in the Hope system?

A. I would be glad to do so, but I must have my working papers from which this determination was made.

The TRIAL EXAMINER. Are the working papers here?

The WITNESS. Yes.

* * *

720 Q. Referring to the question I asked, will you please describe the development of the unit cost for South Penn casing?

A. On page 4 of Part C of Exhibit 16, the unit price is shown for 6⅝-inch South Penn 20 pound casing as 77.1 cents per foot. That price comes from the working papers, and was arrived at as follows—this particular size and weight of casing is one of the so-called tonnage items upon which the mills quote a lower price than the non-tonnage items, and their price quoted to us was 71.54 cents per foot f. o. b. Pittsburgh. This 71.54 cents per foot is subject to a cash discount of 2 per cent, which brings the net mill price to 70.11 cents per foot. The freight from Pittsburgh to the average West Virginia destination was found to be 22 cents per cwt., which, applied to the 29 pounds per foot results in a freight cost of 4.4 cents per foot, making a total delivered cost of 74.51 cents per foot of pipe delivered.

In order to include all of the costs involved in purchasing and checking and warehousing of a part of this casing that is always necessary, we have added a miscellaneous material cost allowance of 2.61 cents per foot, which is 3½ per cent, bringing the
721 total cost per foot of this casing as found in the well, to 77.12 cents per foot. We eliminated the .02 cents, using the figure of 77.1 cents per foot, as shown on page 4 of Part C of Exhibit 16.

Q. Mr. Rhodes, how did you determine 3.5 per cent for warehousing and miscellaneous?

A. That is a matter of judgment and experience in handling materials of that kind, and I would call attention to the fact that whenever a well is drilled, more casing and tubing is sent out than the actual amount expected to be finally required in the well, because of unknown conditions that are likely to be encountered.

Generally speaking, the material for a well is ordered out at one time and shipped, but 20 to 30 percent and sometimes 40 per cent additional material is taken out of the same local stock to supply this working additional amount. That involves warehousing.

And of course, there is the purchasing, which purchasing is generally requisitioned and specifically for each well, to fit the needs of that well.

As I pointed out yesterday, casing and tubing is not purchased in bulk quantities and drawn upon as is the case of line pipe.

Q. Will you please refer to page 5 of Exhibit 16, Part C. And may I digress for a minute? Does that 3.5 per cent
722 apply to all casing or just to a particular size?

A. We applied 3.5 per cent to all casing and tubing.

Q. Now, on page 5 of Exhibit 16, Part C, Closing-in Equipment, wells with one producing string, the unit cost is $66.73. Will you please explain the development of that unit cost?

A. This item of 2,300 assemblies of closing-in equipment at a unit of $86.73 covers the material only of a bill of materials which was found by analysis of about ten per cent of the wells to be used as the Company's average practice in connecting the tubing from the well to the lead line on the ground. This bill of materials and the unit prices which we have received for these materials—quotations for materials, plus freight, are as follows—there is one 6⅝ by 2 inch by 2 inch by 1 inch casing head that costs $14.11. Approximately one-third of the wells contain two tubing clamps for holding the tubing in place. The cost applicable to one-third of the wells being $3.10 per average well. Similarly on one third of the wells there is a 6⅝-inch casing clamp, one third of the cost being chargeable to each well in the amount of $3.26. There is also a set of anchor rods on the average for each three wells, the price chargeable to each well on the average being 81 cents. There is next one 2 inch
723 extra heavy malleable iron T per well at a cost of 79 cents.

Next is two of the one-half inch blower flange per well cost $1.89. Then there is next a 10 inch by one-half inch nipple, costing 49 cents and next a nipple 11 inches long costing 22 cents and another two-inch nipple, 17 cents, a five-inch nipple, 11 cents, a half-inch nipple, six inches long, costing 4 cents. There is a two-inch plug, costing four cents, two half-inch plugs costing 2 cents and then there is a two-inch gate valve, Ludlow No. 9, reflecting average practice, at a cost of $57.38.

There are two of these two-inch gate valves at a total cost of $57.38. There is a half-inch stop valve in the blow-off costing $1.40. The sum total of the purchase price of these materials plus freight is $83.80. There is added $2.93 for purchasing, warehousing and other miscellaneous material costs, bringing the total up to $86.73.

In the working papers, but not available to me here, now, is a sketch which shows the manner in which this bill of materials is connected up between the well and the lead line to the gathering system.

Q. Have you indicated the percentages of the components of the unit cost?

A. I have shown only the dollar amount of the components.

Q. You do not have the percentage of materials?

724 A. This is all materials in this case. The labor is included in the cost of drilling the well and installing the casing and tubing.

The TRIAL EXAMINER. Will you speak a little louder, please, Mr. Springer? We cannot hear you very well.

By Mr. SPRINGER:

Q. What percentage of material overheads are applied on the materials?

A. Miscellaneous material costs are applied in the amount of 3½ per cent as was explained before for purchasing, warehousing and checking receipts, contingencies, and omissions, and so forth.

Q. On page 5 of Exhibit 16, Part C, will you please describe the development of the unit cost for Miscellaneous equipment for wells with one producing string and the unit cost you have used is $121.29.

A. The pricing of the miscellaneous equipment in the well was a complete pricing of approximately ten per cent of the wells in each class of producing strings. The list is several pages long for each district, but it consists of packers of various kinds and shapes, and casing shoes and plugs, and a hundred and one details, most of which are small. These wells having one string that were priced aggregating 228 wells. Every item of mis-

725 cellaneous equipment in those wells was shown by the well record and was priced at an aggregate amount of $27,653.88 including the same 3½ per cent of miscellaneous material costs. And the average cost per well was arrived at by dividing that total by 228 wells which gave the $121.29.

Q. Mr. Rhodes, is there a percentage of material and miscellaneous overheads applied to that miscellaneous equipment unit cost you just spoke about?

A. I don't follow what you mean.

Q. The former accounts for which you described unit costs had a 3.5 per cent figure for material and miscellaneous overheads. Is there such an element in this figure of cost?

A. I have already explained that there was a 3½ per cent allowance for miscellaneous material costs included in this unit cost per well.

Q. Will you please refer to page 6, Exhibit 16, Part C, account No. 332–2, 25 horsepower gas engines, and you have used the unit cost of $2,057.48. Will you describe the development of that?

A. This item of pumping equipment of 25 horsepower gas engines is comprised of the following bill of materials—one 25

horsepower gas engine which we have priced as a Cooper-Bessemer gas engine, at a cost delivered of $1,289.16. There is a ten-inch belt, 90 feet long on the average, at a cost of $77.40. There is a $15 item for T-frame and swivel connection, and an $8.25 item for 7/8 inch wire rope clamp. An $18.80 item for an oil saver with upper and lower stuffing box. There is an item of $556.50 for a 7/8 inch wire cable, on the average, 3,500 feet long. There is an item of $2.70 for a 7/8 inch rope for the wire line. There is an item of $27 for three pumping sinkers 1 3/8 inches in diameter and 15 feet long. There is an item of $2.15 for a valve rod, 7/8ths inches in diameter and 7 feet long. There is an item of $11.90 for a working barrel 2 inches in diameter and about 8 feet long and an item of $8.28 for one set of upper and lower valves, 1 3/4 inches in diameter. The total amount of these items delivered is $2,017.14. To this is added a miscellaneous material cost of 2 per cent which we use for miscellaneous machinery, bringing the total cost to $2,057.48.

Q. Please refer to page 107 of Exhibit 16, Part 1, captioned "Pipe, Steel, Lapweld Screw."

Will you describe the development of the material unit cost of .148 for 2 3/8ths inch O. D., weight 3.75 pounds per foot?

A. The unit cost of 2 3/8ths inch, 3.75 pounds screw-coupled steel pipe, Lapweld, as shown on page 107 of Part C of Exhibit 16, as 14.6 cents per foot. This was arrived at as follows:

727 The manufacturer's quotation f. o. b. mill in the Pittsburgh district was 15 cents per foot, subject to a discount to large purchasers of ten per cent, and two per cent successively. Applying your discount resulted in a per-mill price of 13.23 cents per foot. For this class of material, the average freight rate was 22½ cents per 100 pounds, applied to the weight of 3.75 pounds per foot resulted in a freight cost of .084 cents per foot, bringing the total delivered cost of the bare pipe itself as 14.07 cents per foot. To this was added miscellaneous material cost for checking, purchasing, receipting, warehousing and so forth, at 3½ per cent, the amount of which was .0494 per foot, bringing the total cost to 14.56 per foot. This was rounded out to the nearest tenth of a cent as 14.6 cents.

Q. Will you describe the development of the labor unit cost related to that item, .23?

A. In order to make it clear to the engineers for the various Commissions examining these working papers, I have had prepared an explanation of the determination of the unit price of

pipe line construction as related to another size of pipe than two-inch. It is a volume of some fifty pages of tables and charts and explanations that to translate into terms of particular sizes of pipe you asked for, would be quite impossible on the witness stand.

Q. Then you made a unit cost study of one size of pipe
728 as a base, and you have translated that to other sizes of pipe?

A. No; I made the unit cost development for four different sizes and all different kinds of pipe for all different kinds of construction conditions, and this explanation which we prepared and put into the working papers showed how that determination could be applied to a specific size of pipe for specific kinds and conditions that would be encountered on the average in the constructing of any particular kind and size of line. The size chosen was one representing a considerable amount of money, namely 12-inch Dresser-coupled line. I am at a loss to give you readily the development of the cost of the particular size you asked for. It would have to be prepared for me.

Q. Is the development of the unit cost for 12-inch pipe typical of the development for all other sizes?

A. Absolutely.

* * *

730 Q. Have you used different percentages in the development of material unit costs for the various sizes of pipe?

A. In general we have used 3½ percent on the sizes up to 6⅝ inches in diameter, where in general the lines are relatively short and involved a considerable amount of warehousing. The miscellaneous material cost is reduced to 2 percent on lines 8 inches in diameter and over, where in general the length is so great that a considerable portion of the material can be taken directly
731 from the cars to the right of way.

Q. Will you please refer to page 110 of Exhibit 16, part C, your unit cost of $4.35 for Dresser coupling, style 38 for ten-inch, nominal diameter 5/16ths by 7.

A. Without reference to the exact details, I think I can explain the unit cost completely. The $4.35 per coupling is made up of the manufacturer's quotation at the mill of $4.03 f. o. b. Bradford, Pennsylvania. The freight rate in this class of material is 31 cents per cwt. which applied to the average weight of 57 pounds gives a freight rate of 17.7 cents per coupling, making a total delivered cost of $4.207 per coupling. A miscellaneous

material cost which covers also the incomplete inventory in that the number of couplings was calculated at 20-foot spacings on the lines, amounts at 3½ percent to 14.7 cents per coupling, giving a total figure of $4.354 each, which we rounded out to $4.35.

Q. Will you please refer to page 113 of Exhibit 16, Part C and describe the development of the unit cost of $185.14 for drop assembly described as pipe drips, type 34, 10 inch by 33 feet?

A. These type 34 ten-inch pipe drips are made up of a bill of materials of approximately 40 items, and a list of about a
732 dozen items involved in the assembly and installation costs.

The principal items that enter into the construction is the main body of the drip, which is 33 feet of ten-inch pipe at a cost of $40.36. There is one 2-inch gate valve at a cost of $20.91. There are two special castings on the ends of the barrel, one of which costs $17.83 and the other $16.73.

The other items are odds and ends which bring the total specific cost up to $106.61, to which there is added a miscellaneous material cost for purchasing, warehousing and so forth of $3.73, which is 3½ percent, making a total of material cost of $110.34.

There are a number of items involved in the assembly such as threading and making up threaded joints of ten-inch, four-inch, two-inch and so forth, making up certain plans, joints and so forth, and handling the things in detail. The detail would show the labor cost directly expended of $33.

In this class of labor, work in assembling drips, we have found that miscellaneous construction costs involving the use of tools and gripping and machine tools in the shop and so forth amount to 50 percent, or $16.50. This drip weighs approximately 1,800 pounds, and for the cost of unloading and hauling it and stringing it and putting it into place in the ground we have used 14.1 cents per pound, which is the average cost of pipe for pipe
733 lines under easy construction conditions, making $25.30 for carrying the assembly drip out from the shop and putting it into place in the ground, making a total installation cost of $71.80. This, added to the total material cost of $110.34 results in a total cost of $185.14.

Q. Is that drip underground?

A. Almost entirely so.

Q. How did you get the inventories for that?

A. The inventory was obtained by examination of the records, drawings as to types of drips, by conversation with the men in the shops who built such drips, and information from the line

walkers, and so forth, and from which we determined the number of each kind and size of drip that are listed in the priced inventories.

Q. You mentioned special tools for the installation of drips. Could you give us an idea of what tools were used?

A. What I mean by special tools is this—these drips are generally made up in the shops, where you have to use pipe cutting and threading tools and machinery and wrenches, and so forth. I did not have in mind that tools for no other purpose were used, but the tool cost and use of shop equipment in this kind of work generally involves miscellaneous costs, including contrac-
734 tors' allowance of 50 per cent on pipe work. That is a common experience of pipe contractors, that to their direct labor cost they must add 50 per cent to give them their true costs, with the normal allowance for profit, and so forth.

Q. Is not welding employed more than the other type you have described?

A. Not on that particular type of drip. That particular drip is made up largely of screw pipe. The item immediately below is shown as welded drips. There is about the same number of welded drips, which are shorter, and are shown to cost less.

Q. Will you please refer to page 111 of Exhibit 16, Part C, under the caption, Terminal Valve Assemblies. There is a unit cost of $80.52 for valves, gate-flanged, Ludlow, 6-inch (c) of which there are 1117.

A. This unit cost is made up of one valve at a delivered price of $51.62. There are a pair of companion flanges at a cost of $4.30 and there is one plain end nipple at a cost of 51 cents, making a total cost of materials delivered of $56.43, to which is added 3½ per cent or $1.98, bringing the total material cost to $58.41.

The labor of assembling and installing these valves amounts to $11.50 for assembling, which comprises making up of threaded
threaded joints and nipple and connecting up the flanges to
735 the valve, making one welded joint, and the handling of the material and the assembly in the shop, amounting to $11.57, to which is added the miscellaneous construction cost as explained of 50 per cent in the amount of $5.79.

The installation of this valve was figured at 14 cents per pound as in the case of the drip previously described for 339 pounds, making a total cost of unloading it and hauling it out to the field and putting it in the line of $4.75, making a total cost of assembly and installation of $22.11, which added to the $58.41 material cost gives a total of $80.52.

Q. Do you know the list price and the discount on that valve?

A. I will look that up.

Q. May I ask whether your description of the development of the unit cost for this valve is typical of all the similar classes of property?

A. It is. It consists of the detailed bill of materials that are always installed together, whether it be a valve or a drip or a pair of orifice flanges or what not, there is in the case of each of these items a rather well-standardized assembly of materials, which is priced in detail both as to the materials themselves and as to the cost of threading pipe and installation following a uniform procedure.

736 In the working papers in general, sketches will be found that assist in following the details.

In determining the prices of valves, we found that this particular valve was a Ludlow 51⅝ valve and was quoted at $102 per valve, less 23½, 25, 10 and 2 per cent chain discount which applied to the $102, and gave a net price of $51.62 which was used in building up the unit costs of the assembly.

Q. Will you turn to page 260 of Exhibit 16, Part D and explain the development of the unit cost per foot of $1.013 8⅝ths inch 29.35 pounds per foot screwcoupled pipe.

A. This pipe is priced at a material cost of $1.013 per foot, which was arrived at as follows:

The manufacturer's quotation for carload lots was quoted to us as $1.0512 f. o. b. Pittsburgh. This for the large purchasers was subject to a discount of 10 per cent and 2 per cent, successively, bringing the net price f. o. b. the mill to 92.72 cents per foot.

The freight of 22½ cents per cwt. was applied to 29.35 pounds per foot, resulting in a 6.6 cents per foot freight cost and making a total delivered cost of this pipe of 99.32 cents per foot.

To this price was added miscellaneous material costs in the amount of 2 per cent or 1.99 cents per foot, making a
737 total material cost per foot of pipe in the amount of 1.0131 cents per foot which was rounded out to 1.013 per foot.

Q. Do you have a list price and discount for that type of pipe?

A. We asked the mill to determine for us the price per foot from their standard lists and so-called basic discounts, which they did. We started in each case from the mill quotation per foot.

Q. Do you know whether that included what you call a chain discount which you described for the valves?

A. It was subject to a discount of 10 percent and 2 percent, the 2 percent being for cash and the 10 percent being the large user's discount.

Q. Will you please refer——

Mr. COCKLEY (interrupting). Before you go ahead, I have just one question to clear the record, if I may?

These pipe prices you have been reading into the record here, Mr. Rhodes, do not reflect the fact which I think you have explained before, that there is an additional ten percent taken later on all of it, isn't there?

The WITNESS. That is true. These prices are the prices at which we have priced the inventory and which we had carried out, before we were able to reach any conclusion as to whether
738 or not an additional ten percent or other discount could be obtained. We don't know now that it can be obtained on any and all sizes. The conclusion I reached was that in the aggregate, a discount of ten percent additional could be obtained, which is the equivalent of 10, 10 and 2 percent discount from the mill price.

Mr. COCKLEY. If you were building up the unit costs then to reflect all of the discounts you have taken, you would have your ten percent, ten percent and two percent right in here, would you not, instead of having 10 percent and two percent, and then 10 percent more?

The WITNESS. It might have been done that way.

Mr. COCKLEY. As it is, you have 10 percent and 2 percent here, and then another 10 percent later on on all of it?

The WITNESS. That is correct.

By Mr. SPRINGER:

Q. Mr. Rhodes, will you please refer to page 261 of Exhibit 16, part D and explain the development of the unit cost for material of 2.338 for 20-inch pipe of 65.70 pounds per foot. You have a total cost of $3,692,251.

A. That total cost is for labor as well as material.

Q. I am just seeking the development of the unit costs for material.

A. The mill price of 20-inch, 65.70 pounds per foot,
739 lapweld plain end field pipe is 2.4309 per foot. Applying the large user's discount of 10 percent and the cash dis-

count of 2 percent results in reducing the net mill price to 2.1441 per foot. The freight cost of 22½ cents per cwt. is 0.1478 per foot, making a total delivered cost of the pipe itself 2.2919 per foot.

Adding to this a miscellaneous material cost of 2 percent, which is 4.58 cents, this brings the total material cost per foot of pipe in the ground to 2.3377 per foot. This was rounded out to 2.338 per foot.

Q. Now, please refer to page 262 of Exhibit 16, Part D, and describe the development of the unit cost per foot for material amounting to 1.710 for 12¾ outside diameter inches of welded pipe at 49.56 per foot?

A. This pipe in question, is plain end seamless pipe which is made up into a welded line, the pipe itself being 12¾ inches outside diameter, and weighing 49.56 pounds per foot. The quoted mill price of this pipe is $1.7745 per foot to which, applying the discounts of 10 percent and 2 percent reduces the price to $1.5651 per foot.

Freight at 22½ cents per cwt. is 0.1115 per foot, making a total delivered cost of $1.6766 per foot. Miscellaneous material cost of 2 percent is added, which brings the total material
740 cost of the pipe in the ground to $1.7101 per foot, which was rounded out to $1.710 per foot.

* * *

Q. Mr. Rhodes, is that the pipe which was used in the pipe line from the Cornwell Station to Hastings?

A. I believe so; yes.

Q. Will you please refer to page 67 of Exhibit 16, Part E, under Compressor Station Equipment, Cabot Compressor Station, main Units.

Will you explain the development of the unit costs for 470 horsepower gas engine compressor units?

A. This 470 horsepower engine, which is typical of a considerable number owned by the Company was built by the National Transit Pump & Machine Company. It is a four-cycle type of engine, horizontal single tandem, double cylinders, twenty inches in diameter by thirty-six inch stroke.

The National Transit Company quoted us a price for this engine which we rejected as not being typical of the prices at which we could buy the equivalent engines from other manufacturers. The lowest price we were able to get for such
741 engines quite in accord with our own experience was obtained from the Cooper Bassemer Manufacturing Com-

pany at $23,000, net, f. o. b. shipping point. This engine weighs approximately 153,000 pounds.

We added to this price the average freight to destination which was determined by applying to this weight of each of the engines, the freight to the respective destinations, there being almost forty such units. This freight averaged $530.91 per engine. We then added miscellaneous construction costs for purchasing, checking, receipt of engine, and so forth of $235.31, which is 1 per cent, bringing the total cost f. o. b. average, railroad siding, $23,766.22. The three engines at the unit price would cost $71,299.

Mr. MILDE. You said miscellaneous construction cost?

The WITNESS. I should have said miscellaneous material cost.

By Mr. SPRINGER:

Q. Will you describe the method by which you determined the installation cost?

A. The estimates of the cost of erecting equipment in compressor stations was based on detailed estimates of typical units of such equipment, the estimates themselves being based on experience in erecting such equipment.

For instance, engines of this general description are shipped knocked-down. They are so big and so heavy that
742 they would occupy some three or four freight cars, and they are knocked down into many pieces that have to be handled separately and then assembled when they are being erected on foundations.

That class of engines we call Class 1. We have had considerable experience and the Company has had considerable experience which we drew on by consultation, in the erection on the one hand of the twin tandem engines of such type, of which the Company has a few, and the single tandem engines, the twin tandem engines of which we have detailed costs and weigh 192 tons, and the single tandem engines of which we had erection costs weigh 85 tons.

This detailed unit cost development shows that in unloading these engines from the railroad cars, 583 man-hours would be required in riggers, riggers' helpers and common labor.

There is about half common labor at 45 cents an hour and about half of riggers and riggers' helpers at 85 cents and 55 cents an hour respectively. This cost is $324.55 bare labor costs for the 192 ton double unit and $161.50 for the 290 hours of labor of the 85 ton single tandem unit.

After unloading these engines from the cars, they have to be skidded on blocks by the use of jacks and chain and
743 falls and block and tackle, and tractors, and by a great deal of brute strength and awkwardness, because some of the parts weigh 25 to 30 tons apiece, they are erected and assembled on the foundations.

There are included in this assembly on the foundations the cost of setting the foundation bolts which have to be set in advance, of the erection, paying the cost of handling and assembling and erecting these engines, which requires 3,378 man-hours of labor for the large engine at a cost of $2,233.33, and 1,715 man-hours at a cost of $1,129.25 for the single engine?

This labor is predominently in man-hours, mechanics and mechanics' helpers, which accounts for 1,418 man-hours for the large engine and 710 man-hours for the small engine.

The mechanics are rated at 85 cents an hour and the mechanics' helpers at 55, the same as the riggers and riggers' helpers.

The next most important element in the labor is 951 man hours common labor in the big engine and 500 in the small engine which, on account of the fact that so many men are required, a certain amount of what we call first class common labor is used, which brings up the average rate per hour to 47½ cents.

There is an electrician involved for 56 hours with his
744 labor for connecting up the ignition, the pipe fitters for connecting up the oil pipe, and so forth. All of these are shown item by item and aggregating the number of dollars shown.

This total unloading and erecting cost then amounts to $2,557.88 for the large engine and $1,290.75 for the smaller engine, these being the amounts of money that would be paid to labor.

The insurance on labor in this class of work was quoted to us by the insurance agencies at 7.274 per cent of the payroll, which brought the total cost of labor plus insurance to $2,743.94 for the large engine and $1,384.64 for the smaller engine.

These are the direct labor costs. We have found from experience that a great deal of money is spent in connection with handling this kind of equipment in skids and blockings and special equipment, so that it is necessary to add to the direct labor cost, 80 per cent to cover these miscellaneous costs and the contractors' allowance.

That brings the total costs of erecting the engine to $4,939.09 for the 192 ton unit and $2,492.35 for the 85 ton unit.

In the erection of all such equipment, it is necessary to have in charge in each station a manufacturer's erection
745 engineer, the current charges for which, including expenses, are $25 a day. On the average, such a man spends 30 days per unit on the 192 ton units and 18 days on the 85 ton units. This charge we have taken as being paid directly by the company and not by the contractor, so that the total cost to the company of installing these 192 ton units was $5,689.09 and for the 85 ton units $2,942.35.

That was the first step.

None of these engines was exactly the way that the engines in which we had experience and were able to estimate definitely the cost so we interpolated between these costs for intermediate weight engines.

For instance, the particular engine that we had reference to weighed, with its compressor excluded, 88.85 tons. In interpolating between these costs for the equipment of 85 tons or 170,000 pounds for the small one, and 192 tons or 384,000 pounds, we proportionately interpreted those figures and found that the engines weighing from 176,000 to 180,000 pounds, within which range weight the 88.58 tons comes, we found a cost of $3,050 as the total cost of erecting such equipment.

This applied to three units, gives the $9,150.

Q. You spoke of a contractor's allowance. Will you give us the percentage?

746 A. The contractor's allowance is included in the 80 percent out of the total of 180 percent of labor as the price. 165 percent of the 180 percent is miscellaneous construction cost and 15 percent out of the 180 is the contractor's allowance. That 15 percent is measured in terms of 100 percent labor cost, rather than the 165 percent cost to the contractor, so that it represents about 8 percent of the contractor's own costs in the allowance for his profits, overhead, and so forth.

Q. On page 67 of Exhibit 16 Part E, will you continue your description of unit costs for compressor station units, by explaining the development of unit costs for compressor cylinders, Ingersoll-Rand?

A. Again, we found that the quotations by Ingersoll-Rand for these large compressor cylinders, were not reliable, they're not making very many such cylinders in the market today, so in pricing the Ingersoll-Rand compressor cylinders, we used the prices per cylinder of the whole range of cylinders quoted by Cooper-

Bessemer and by Worthington, which were consistent one with the other, in some particular sizes Worthington being lower, and the other sizes Cooper-Bessemer was the lower.

In each case we took Cooper-Bessemer or Worthington, whichever was the lower, and in this case the price per cylinder
747 of 34 inch diameter by 36 inch stroke, the first of the two descriptions on page 67 was $5,500 f. o. b. factory. We took the Worthington price. The Cooper-Bessemer price, for instance, was $6,042 for the same size of cylinder, the difference in the prices generally coming from the different point where they changed the frame or casting to accommodate the bore.

Starting with the $5,500 we added the average freight, $108.68, bringing the total price per cylinder delivered to the nearest railroad station $5,608.68. To this was added the miscellaneous material cost of 1 percent of $56.09, making a total cost per cylinder of $5,664.77, which applied to the three cylinders gives $16,994 shown on page 67.

Q. Will you please turn to page 90 of Exhibit 16, Part E, captioned Compressor Station Foundations, and explain the development of the unit cost per cubic yard of $18 for the 8 main units at the Cabot Compressor Station?

A. In determining the cost of foundations, for the main units, which are generally fairly large and fairly simple foundations, we determined the total cost per yard for a number of foundations aggregating over 5,000 cubic yards of concrete. We found that there was 9,071 cubic yards of excavation required, which was priced at $1.10 per cubic yard of excavation.

748 3,697 of those cubic yards of this excavation was required to be back-filled around the excavation at a cost of 84 cents per yard.

There was 5,329 yards of concrete at a cost of $10.21 per yard, and there was 56,000 square feet of rather complicated forms at 45 cents per square foot. There was 28,238 pounds of reinforced steel at 4.8 cents per pound.

Aggregating the dollar cost of all of these foundations was $94,055, which divided by the 5,329 cubic yards of concrete, gave an average cost of $17.65.

We used $18.00.

Q. Do you know what the cost of the aggregate is which is included in the $18?

A. The aggregate in this concrete, comprising sand and gravel, totalled $3.38 per cubic yard as bare cost. In other words, what the contractor would pay the vendor of that sand and gravel.

Q. Do you know what price per sack the cement was?

A. The cement was $2.41 per barrel.

Q. And the price per ton of sand?

A. We have it here as the price per yard.

Q. All right.

A. $2.60. And the gravel, $2.55.

Q. Now, Mr. Rhodes, will you please refer to page 137 of
749 Exhibit 16, Part E.

The TRIAL EXAMINER. Is there any contractor's allowance in that?

The WITNESS. Yes. After the labor is added, there is a 22 percent to cover the contractor's miscellaneous costs.

The TRIAL EXAMINER. That is included in the $17.65?

The WITNESS. That is correct.

By Mr. SPRINGER:

Q. Referring to page 137 of Exhibit 16, Part E, boiler plant, Cornwell Compressor Station, will you describe the development of the unit cost for boilers, Babcock & Willcox 500 horsepower sterling boilers.

A. These boiler units in the Cornwell compressor station comprise five five-hundred horsepower Sterling boilers, which the Babcock & Willcox Company quoted to us erected for $61,300 to which there are added 2 percent miscellaneous costs, making the total for the boilers themselves $62,526. These boilers all contained Diamond soot-blowers at a quoted cost of $5,800 erected, to which was added the 2 percent miscellaneous material cost, bringing the total for the soot-blowers to $5,916.

The superheaters were also quoted erected by the Babcock & Willcox Company at $13,445, which after adding the 2 percent miscellaneous costs, brings the total to $13,714.

750 There are stacks and bridgings at a quoted price of $17,430 which, after adding the 2 per cent miscellaneous costs became $17,778.60.

The brickwork for the boiler setting was quoted at $33,500 to which $670 was added for miscellaneous material costs, bringing the total to $34,170.

These five items add up to $34,170.

Q. Just what would those miscellaneous costs cover that you repeat very frequently in unit cost development?

A. They cover the costs involved in the purchase of the equipment and in the checking of its receipt, the payment of invoices,

the miscellaneous odds and ends of equipment which have been installed by the company since the original installation by Babcock & Willcox, who had only the bill of materials as originally sold. That generally describes the miscellaneous costs as applied to the boilers.

Q. Don't you include that same type of costs in your general administrative overheads?

A. No; those general administrative overheads are all in addition to the costs involved in the purchase and checking the receipt of materials. All the general administrative forces have to do with that are to pay the bill when it is approve if and when sent to them.

Q. Is it not general practice to put the purchase cost
751 into the general administrative overhead?

A. They can be so placed but I have not done it in this set-up, because I wanted all of the costs of construction to include the same thing, whether it is by contractor or by the Company.

Q. Do you know what the treatment was in the Cleveland rate case for this same item?

A. I don't recall.

Q. Will you please turn to page 139 of Exhibit 16, Part E. Cornwell Compressor Station Boiler Plant and Coal and Ash Handling Equipment and describe the development of the unit cost totalling $20,258?.

A. This equipment described here was furnished by the Link Belt Company, and they quoted us for this equipment $19,286 f. o. b. Philadelphia, giving us a weight of 115,000 pounds.

The freight rate on this class of equipment was 50 cents per 100 pounds, which added to the factory cost gave $19,861.

Again the 2 per cent miscellaneous material cost was added in the amount of $397, bringing the total cost up to $20,258.

Q. Do you know that the Hope Natural Gas Company no longer burns coal?

A. That is a temporary situation. They must necessarily be equipped to burn coal in their stations, as the natural
752 gas supply may become short during the winter periods, or conditions may gradually change in the availability of gas.

Q. Do you know the last time that this coal and ash handling equipment at the Cornwell Compressor Station was used?

A. No, I do not.

Q. Will you please refer to page 156 of Exhibit 16, Part F, Compressor Plant, Hastings, No. 1 Compressor Station, and de-

scribe the development of the unit cost for yard-lines, 3,043 feet of 16-inch pipe at $4.24 per foot?

A. This cost of $4.24 per foot of 16-inch pipe in the yard lines, is based on pipe at a unit cost per foot that has been used in pricing pipe lines for this same 16-inch pipe, namely $2.153 per foot. That was before the allowance for the miscellaneous costs, and we found on analyzing those lines in the yard lines in a number of stations, taking into account the different sizes of lines that in the case of the 16-inch yard line, there were fittings in the run of the line which brought the total cost f. o. b. railroad to $2.799 per foot, on the average for 16-inch lines. This material being in miscellaneous lots, by that I mean that not very much of it is in existence in any one station, and consisting of a number of parts of various lengths, we treated it as small line pipe and added the 3½ per cent miscellaneous material costs instead
753 of the 2 per cent which would be done if it were laid in a main line.

The cost of installing this 16-inch pipe was based on the cost of installing such size under the conditions in West Virginia, determined by the method which is explained in the document which is Exhibit 17, with allowance for the fact that a considerable additional work is involved in the installing of fittings, as compared with pipe. This installation cost was $1.34 per foot, bringing the total cost including installation to $4.2377 per foot, which was rounded out to $4.24 per foot.

Q. Is that unit cost development which you have described typical of the prices applied to all lines?

A. That is correct, except that we find for the smaller sizes a greater additional cost because of fittings, there being a greater proportionate amount of fittings in the small lines than in the big ones, otherwise the method of determining the unit costs was the same for all sizes of line from the smallest to the largest.

Q. What was the additional amount for the two-inch pipe?

A. Proportionately we found by analyzing a considerable footage of the two inch pipe that the fittings in the two-inch lines cost almost as much as the pipe itself did. These
754 prices from the smallest up to five inches in diameter include in a general way considerable footage in the various stations, and we found on the average that the fittings cost 98 per cent of the price of the pipe, whereas from the six to fourteen inch, inclusive, the fittings only cost 34 per cent of the cost of the pipe, and the sixteen and eighteen, 30 per cent, and the 20

and 24 inch 20 per cent. Those figures are arrived at, as I say, by pricing a considerable footage of lines to avoid having to type in a complete unit cost development for a long list of bills of materials which would add nothing to the accuracy of the whole result.

Q. Will you now refer again to page 18 of Exhibit 16, Part E. For the Bee Compressor Station, you priced four main units of foundations, is that correct?

A. That is correct.

Q. On page 7 of the same volume, there appears to be only two main units in the Bee Compressor Station.

A. That is correct.

Q. What use is being made of the two idle foundations?

A. No use is being made of them, and that fact is reflected in the reproduction cost new less depreciation of that station.

Q. You priced everything not used or useful and then depreciated it?

755 A. If it was still carried in the original cost determination, it was included in the reproduction cost new, so that they could be properly accounted for, but in determining the reproduction cost new less depreciation, the cost of those foundations is wiped out.

Q. If the structure housing this compressor station and only two units being used was twice as large as required for those two units, did you also consider that in your reproduction cost new less depreciation?

A. I reflected the partial use of that structure by eliminating the cost of that which could be dispensed with and still allow sufficient operating space for the two remaining units.

Q. That situation is true in many places throughout the Hope system. Have you been consistent in your treatment of them?

A. I have tried to be, and so far as I know I have been completely consistent.

Q. Did you explain Mr. Rhodes, why the foundations which do not have units upon them in the Bee Compressor station were included in your reproduction cost new estimates, and why you treated them as a part of the depreciation relating to the station in your reproduction cost new, in your depreciation estimates?

756 A. We tried by every possible means to make the inventory of reproduction cost new correspond with the inventory of original cost, so that the two would be properly compar-

able, and for that reason we left in the reproduction cost new certain buildings, certain foundations and certain equipment which we treated specially under depreciation to reflect the fact that the building was no longer useful or the foundation was no longer useful or the equipment was merely being held there as though in a warehouse.

Q. Then your original cost and your reproduction cost really are not comparable, are they?

A. Oh yes; because in the original cost, the entire building and all of the foundations and all of the equipment were included.

Q. The original cost does not reflect the retirement of the two foundations that are not being used?

A. No, it does not.

Q. But you do reflect that in you reproduction cost new less depreciation?

A. I take out the nonuseful features.

Q. I was just wondering why you did not eliminate it from the inventory in the first place.

A. It was desired by the management to continue these items in the original cost and to have the reproduc-
757 tion cost new correspond to the inventory and with original cost.

Q. Did you personally make an inspection of the property of your reproduction cost new less depreciation estimate to determine what was not used or useful?

A. I did not personally inspect the property for that purpose, but an inspection of the property was made by my staff to determine to what extent that was so.

Q. Will you please refer to page 25 of Exhibit 16, Part G, Indian Creek Compressor Station equipment, and explain the development of the unit cost for the generator five kilowatt DC, 125 volts at $275?

A. This motor was a motor that the Triumph Electric Company stated they were not now making and suggested that we use the General Electric Company's price for a motor of like description, which was $300 from which we took a quoted discount of 14 per cent, getting a net price of $258 f. o. b. factory. The pulley and base were added, bringing the total cost up to $270 to which, adding a 2 per cent miscellaneous material cost brought the total up to $275.44 or $275 as we used it.

Q. Now, Mr. Rhodes, will you please refer to page 95 of Exhibit 16, Part B, producing gas wells and well construction, and describe the development of the average unit cost per foot of $2.43.

758 A. I have already described the method generally, but there exists in the working papers a memorandum of the procedure followed, which corresponds to that in the determination of the cost of laying pipe. This goes into full detail, and there are fifteen or twenty pages. This is available to you for such use as you may desire.

* * *

759 Q. Now, Mr. Rhodes, will you please refer to page 7 of Exhibit 16, Part I, and describe the development of the unit costs of the general office buildings in Clarksburg, West Virginia at $0.457 per cubic foot.

A. This office building as it existed at December 31, 1938, was measured up in detail, and quantities of all kinds of work entering into the construction of the building were determined, starting with excavation and going to the buzzer system.

There are two whole pages of items and another half a page making approximately 100 items, but in pricing these items in detail, it was found that the total cost of constructing that

760 building as of the period of 1938 and 1939 was $115,762.29.

The volume of the building was 253,368 cubic feet, which gave the cost per cubic foot of 0.457 per cubic foot.

That method of pricing in an inventory was used to avoid the extreme detail of the large number of items entering into its construction.

Q. Is there a contractor's allowance in that estimate?

A. The same as in all building construction. For the contractors' miscellaneous material and labor costs and the contractors' allowance there is a total of 22 percent of which approximately 10 percent may be considered as a contractors' allowance, of which, however, he receives only about 8 percent or 9 percent on his costs.

Q. Will you compare that cost per cubic foot of $0.457 with the cost per cubic foot of the one-story wood frame building on page 10 at $0.909?

A. One is a building of 253,000 cubic feet and the other is a very small building, equipped with toilet facilities.

Q. The fireproof building is priced at a smaller cost per cubic foot on page 7 than the wood frame sheet metal building with a

corrugated roof and concrete floor on page 10. Almost twice a
much per cubic foot.

A. That is due to its extremely small size. A building five
foot six by thirteen feet and an average height of eight
761 feet, a little building of 587 cubic feeet, there is no possible
comparison of cost in a building of that size directly with
a building of 253,368 cubic feet. It is about the size of the
smallest room in the big building.

The TRIAL EXAMINER. Does that include the cost of the toilet
facilities too?

The WITNESS. Yes, but it is a building made solely for that
purpose.

The TRIAL EXAMINER. The cost of the facilities would be worth
more than the cost of the building?

The WITNESS. It may well be, in a building of that size, yes sir.

Mr. SPRINGER. Mr. Examiner, that completes our cross examina
tion on reproduction costs.

* * *

2923 **TESTIMONY OF F. P. C. WITNESS PACE ON ACTUAL LEGITIMATE COST OF HOPE'S PLANT**

Transcript pages 2923–2925, 2961–2963

(Omitted in Pace's Testimony Printed in Supplement to Brief of Petitioner)

* * *

Cross-examination by Mr. COCKLEY:

Q. Let us take the case of the property acquired by Hope as utility property from those particular companies; tell me what use you made in your original cost study of those original records; you can start with any one of the three.

A. In connection with the Clarksburg acquisition, there is a positive statement attached to that voucher that the amounts that you recorded in the Hope books were the exact amounts as shown in plant account on the Clarksburg Light and Heat Com-
2924 pany's books and that the same amounts and reserves are reflected in the Hope Company's books in the same amounts.

Q. Is that what you meant by our estimate of original cost; is that what you meant by the Hope's estimate of original cost at the time of acquisition, that statement on that voucher?

A. No; I would not consider that an estimate; that is cost obtainable from the prior utility's books.

Q. What did you find besides that that you would consider an estimate of original cost by the Hope Company at the time it purchased that property?

A. That particular property?

Q. That is what we are talking about; you picked it.

A. I do not know they made any estimates at all in connection with the Clarksburg acquisition; I do not think they did.

Q. How did you treat that Clarksburg acquisition? The plant account was set up as $2,000,000, we will say, and the depreciation reserve at $1,000,000, and they paid $1,000,000 for it; is that right?

A. Yes.

Q. What figure do you show in your original cost exhibit for that property on that assumption; what figure would you show in your exhibit included in the $51,000,000?

2925 A. We show the amount as original cost that was shown on the Clarksburg Light & Heat books.

Q. You would set it up here as $2,000,000 on the proposal I have made?

A. Yes.

Q. And you later put in a depreciation reserve of $1,000,000 as of that date?

A. Yes, sir.

Q. And you would have $1,000,000 net?

A. That is right.

Q. And that is the price that the Hope Company paid for it when it acquired it, is it not?

A. Yes, sir.

Q. And that is what you have got in your figures?

A. That is right.

* * *

2961 Redirect examination by Mr. SPRINGER:

Q. Now in the case of Mr. Antonelli's estimates in his claimed original cost, why didn't you accept those?

Mr. COCKLEY. You mean the part of it that was estimated, are you limiting your question to that?

* * *

The WITNESS. I could see no reason why Mr. Antonelli would be in any better position to estimate those costs than the person that estimated them at the time the property was acquired. I think if it were permitted to re-estimate the same property from time to time, that probably there would be no end to what finally might get on the books.

By Mr. SPRINGER:

Q. You mentioned the possibility of an improper distribution of expenditures explaining some of the differences in the figures which Mr. Antonelli claims for various accounts, and figures which you found to be the valid original cost. Will you elucidate that?

A. Well, there was in the direct labor and material costs which were claimed by the company to have not been capitalized. I don't think they even claim it to be expense; and they also
2962 claim it not in plant accounts. Of course if it can't be identified either in expense or in plant, I wouldn't know just exactly where to look for it.

Q. You mean you doubt that such an expenditure had been made?

A. There was some of the direct labor and material cost that was supported, but an examination of those costs indicate that it was more or less of an attempt to re-account for past costs, and by that I mean go back and change maintenance costs to plant accounts; and for that reason I disallowed that.

In fact I think, with reference to a number of those items, if I had found them in plant accounts to start with I would have thrown them out; but I considered them properly maintenance charges.

Q. And you also found unrecorded retirements, didn't you?

A. Yes.

Q. Now where you found overheads charged to expense, and there was an attempt to capitalize those retroactively in Mr. Antonelli's study, you disallowed those on an accounting principle, didn't you?

A. Yes sir; it wasn't merely the method by which they were computed, it was altogether the accounting principle.

Q. Well, to sum up your ascertainment of the valid original cost as of the end of 1938, you have not disallowed any supported asset accounts in the Hope Company's original cost, 2963 have you?

Mr. COCKLEY. I object to that: there are thousands and thousands of items.

Trial EXAMINER. Well, what difference does that make if he is familiar enough with them to say whether he has or whether he has not.

Mr. COCKLEY. All right.

The WITNESS. We haven't disallowed one dollar, that I know of, from their plant accounts; in fact I think we were very liberal.

By Mr. SPRINGER:

Q. In fact you added $1,400,000 to the plant costs, did you not?

A. We added that much to what was reflected on the books.

Trial EXAMINER. You don't mean that those amounts were unsupported?

The WITNESS. No, sir; that amount was supported.

* * *

1547 **TESTIMONY OF HOPE WITNESS CHISLER ON HOPE'S ACCOUNTING PRACTICES.**

Transcript pages 1547–1560

* * *

JOSEPH C. CHISLER, previously sworn, resumed his testimony:

Examination by Mr. SPRINGER:

Q. You are the vice president and the chief accounting
1548 officer of the Hope Company, are you not?

A. Yes; sir.

Q. How long have you been the chief accounting officer of the Hope Natural Gas Company?

A. Since July 1, 1933.

Q. What was your accounting responsibility before that time?

A. I was assistant treasurer, in charge of all accounting work.

Q. Who was the chief accounting officer of the Hope Natural Gas Company before you?

A. Mr. R. D. Beardsley was the treasurer.

Q. Do you adopt the accounting methods employed in Exhibit 20 by Mr. Antonelli?

Mr. COCKLEY: I do not think that is a proper question to put to this witness—whether he adopts all of the accounting methods. If he wants to ask him about some particular one, why not do that?

By Mr. SPRINGER:

Q. Did you not advise Mr. Antonelli on various accounting phases of his exhibit, and do you disagree with any of the accounting principles that he said he used?

Mr. MILDE. There are two questions there. May we have one at a time?

1549 The WITNESS. I advised Mr. Antonelli on the determination, or assisted in the determination of actual original cost. We determined the interpretation of original cost as defined in the West Virginia Classification of Accounts of 1913—our interpretation.

By Mr. SPRINGER:

Q. And he followed your advice, did he not?

A. Ove a period of two years, of course, we had numerous conferences, and we consulted with our attorneys and my assistants, and Mr. Antonelli also had recommendations, but the

whole plan and procedure was worked out together and the decisions made.

Q. Then you are in agreement with the accounting methods employed by Mr. Antonelli in Exhibit 20, are you not?

A. I am in agreement with the original cost that has been determined and shown in Exhibit 20, that that is the true original cost, according to our interpretation.

Q. Do you disagree with the accounting methods employed in Exhibit 20?

A. I think, Mr. Springer, what is presented in Exhibit 20—what Mr. Antonelli has presented—is the original cost as defined in this Classification of Accounts prepared in accordance with our interpretation, and that is what he has presented here.

1550 Q. Well, then you agree with the method employed by Mr. Antonelli?

A. I agree with the method.

Q. Now, with respect to all the labor costs other than well construction, they were capitalized up to 1918 by the Hope Company, and then expensed to 1923, and then capitalized after that, is that so?

A. There was a portion that has been expensed, from 1918 to 1923—certain portions of the construction.

Q. I asked you for the labor costs other than well construction?

A. That is true, but I stated that all labor costs other than construction were not expensed. That is what I wanted to imply.

Q. For what period?

A. From 1918 to 1923. In other words, there was certain construction work on lines and compressing stations where the labor cost was charged to expense, but not on all construction.

Mr. COCKLEY. That is in the period from 1918 to 1923?

The WITNESS. 1918 to 1923.

By Mr. SPRINGER:

Q. Then from 1918 to 1923, construction labor other than well construction, was expensed, and after that time

1551 capitalized, is that right?

A. If I can make myself clear—our construction work for the period 1918 to 1923, a portion of it, the labor costs—this is other than wells—was expensed. A portion of it was capitalized.

Q. You are familiar with the rate case involving the Hope Company before the West Virginia Public Service Commission in 1921, are you not?

A. I might have been at that time; I have not looked at it for years.

Q. Do you know what the Hope Company contended for the treatment of well construction costs in the 1921 rate case?

Mr. Cockley. I object to that. What conceivable difference does it make what in a local rate case, down here, they contended for in 1921?

Mr. Springer. I think it is highly important, Mr. Examiner, that we determine what claims were made covering the same items, now that they are attempted to be capitalized in this case.

Mr. Cockley. Well, we submit that here is a rate case down here which was obviously a local rate case in West Virginia, and involved distribution rates in West Virginia. The export rate, the wholesale rate, has never been under determina-
1552 tion. Are you going into that rate case in 1921, and then if the Hope Company had another one in 1927, are you going to go into what they claimed then, and then if we go ahead up to the rate case that we had in Ohio, see what they claimed in 1931, and 1932, and in the 1937 case, and I forgot one in Ohio in 1921, and see what was claimed then? Where does it all get us? Either we are entitled to include these things in the original cost or we are not; and what was claimed at one time or another is not going to make a particle of difference, and it is a perfect waste of time.

Mr. Springer. Mr. Examiner, I think this will show the Company's stand and past accounting practices, where it is claimed as operating expense items which now are attempted to be capitalized, and I think that you and the Commission are entitled to know the past accounting practices and the exercise of managerial discretion in accounting for these things. All I am asking the chief accounting officer of the Hope Company is whether or not he knows the past claims of the Hope Company in a rate case.

The Trial Examiner. After all of this discussion, he may know what you mean. The objection is overruled.

Mr. Cockley. Exception.

The Witness. I know what he means, but I don't recall what treatment we gave on the construction costs in that rate case.

By Mr. Springer:

1553 Q. Well, Mr. Chisler, are you aware that the West Virginia Public Service Commission stated in that 1921 rate case that well construction costs was a proper operating expense

for the purposes of that case, and that is reported in P. U. R. 1921 E., page 418?

A. I have not reviewed that and I am not just familiar with what treatment might have been given to well construction costs in 1921.

Q. The financial statements that your company has made in the past have been issued in the expectation that they would be relied upon as being an accurate statement of your accounting policies, isn't that so?

A. They have reflected our accounting, yes. They are prepared monthly, and reflect the conditions and the principles that are followed.

Q. And you consider your books of account to be important sources for the basis of your financial statements, don't you?

A. I do.

Q. Taking the $17,000,000 that, but for a small percentage, has been charged to operating expenses now capitalized in Mr. Antonelli's exhibit, when your company decided to expense those amounts, it did so in the exercise of managerial discretion, did it not?

A. Well, we followed the Code of Accounts, or we exer-
1554 cised that discretion.

Q. Sometimes you had an option to expense or capitalize well construction costs, for instances, didn't you?

A. That is true.

Q. And you made an election and expensed those costs?

A. That is true.

Q. Has the Hope Company always had a competent accounting officer?

A. Well, they have had several of them, and in my opinion, they have been competent; otherwise I do not think they would last very long.

Q. Then the Hope Company's past accounting policies have been the result of competent and well informed deliberate accounting advice, isn't that so?

Mr. COCKLEY. I object to that as calling for a half a dozen conclusions. The facts have been developed and they are perfectly obvious as to how these things were charged, and that is all that is important in this record. I object to it as wholly incompetent, immaterial and irrelevant.

Mr. SPRINGER. I think it is important, Mr. Examiner, that we determine whether or not these representations made through

their financial statements, were well advised, well informed and deliberate.

Mr. COCKLEY. Of course there were not any representa-
1555 tions made through financial statements, to anybody.

Wholly aside from that, this question calls for about three or four different conclusions and is wholly immaterial.

The TRIAL EXAMINER. I think the witness is able to take care of himself and answer the question.

* * *

The WITNESS. I would say that is true.

By Mr. SPRINGER:

Q. Was not the expensing of well construction costs the accounting practice at the time it was employed by the Hope Company in its accounting?

A. The well construction costs, from the beginning of business up to December 31, 1922, was charged to operating expense.

Q. And that was an accepted practice at that time, was it not?

A. That is the acco[illegible]ing principles that we followed, and I think generally in the oil business, and so on, that those construction costs were charged to expense.

Q. As even today some oil companies charge well construction to expense?

A. That may be so, but I don't know. January 1st, 1923, when the new Code of Accounts came in, we started to capitalize
1556 it.

Q. Were the Hope Company's books periodically audited by a certified public accountant?

A. We had our own internal auditing department for quite a number of years. It is only since recently that we have had outside Certified Public Accountants, Price, Waterhouse, I think since the Social Security came in, which made it mandatory at that time.

Q. Was there not a periodic audit by Certified Public Accountants before that time?

A. No, not to my recollection.

Q. Has your company in the past made under oath financial statements based upon your policy of accounting, to regulatory States and Federal taxing bodies?

A. We did.

Q. What effect did the noncapitalization of well construction costs have upon the Hope Company's financial statements to

stockholders, regulatory bodies, Federal and State taxing authorities, and institutions issuing financial publications?

A. Well, of course, the stockholder is the Standard Oil of New Jersey; that is the one stockholder. I don't know that had this $11,000,000 of well construction costs been capitalized,
1557 how large a depreciation allowance there would have been. I don't know what the net effect would have been.

Q. Was not the effect of noncapitalization of well construction costs to reflect less profit because that was charged to operating expense?

A. Well, the difference between the depreciation and the full amount of the well construction costs would probably reflect some change in the net income.

Q. What was that?

A. I say, the difference between the amount capitalized and the full 100 per cent of the well construction costs would have some effect on the results.

Q. I believe you stated that the Hope Company practice of noncapitalization of well construction costs would likewise affect the stockholding company, the Standard Oil Company of New Jersey?

Mr. MILDE. We object to that. That is not a fair statement of anything the witness said.

* * *

The WITNESS. Would affect them in what way?

By Mr. SPRINGER:

Q. Just as you have said. It would be a statement showing less profit if the well construction were expensed.

1558 A. It might be less loss or increased loss.

Q. Doesn't that make some difference in the Standard Oil Company of New Jersey's consolidated financial statement? It is a chain without a broken link, isn't it?

* * *

The WITNESS. Well, of course, the Hope Company happens to be one small company out of a large number in the Standard Oil of New Jersey. I don't know that it would greatly distort their picture.

By Mr. SPRINGER:

Q. You mean that $11,000,000 would not distort the financial statement? That is a sizeable sum, isn't it, Mr. Chisler?

A. Over a period from 1898 down to 1922, it is an accumulated sum.

Q. Are you aware of the Federal Income Tax regulations, which require the Hope Company to elect to treat well construction costs either as operating expenses or as a capital item?

A. Yes; I am familiar with that.

Q. That is Article 223 of Regulation 69, Income Tax Act of 1926, United States Internal Revenue. What election did the Hope Company make in connection with well construction costs for income tax determination?

1559 A. I would not be positive, but I think it treated that as an expense item.

Q. You made a consistent practice of doing that?

A. That is my recollection.

Q. During the period when the Hope Company began capitalizing well construction costs, did the Company's financial statements show the full effect of a change in accounting policy?

A. In effect, we continued to charge that to expense—the well construction costs. There was a reserve set up of the full 100 percent which was charged to depreciation expense or amortization expense, so in effect, as far as the net income is concerned, there would be no change.

Q. In effect, the capitalization of well construction costs was nullified by concurrent additional accounting?

A. That was the effect. I mean we amortized it fully 100 percent each year.

Q. How long did that practice continue?

A. That continued after 1923, to the time when we had this depreciation adjustment which was January 1st, 1927.

Q. Do you mean that after 1923 your company practiced the capitalization of well construction costs, with concurrent additional accounting entries, which nullified that change

1560 in accounting, and that continued from 1923 to 1927?

A. I would not say it nullified it. We capitalized it and amortized it fully down through 1933.

Q. How long did the policy continue after 1923 of capitalizing well construction costs where the net effect was not to change the net income of the company?

A. Beginning with 1934, January 1st, the well constructing costs were placed on a depletion basis, and on the amount of gas withdrawn, rather than on this amortization basis, and as far as the financial statements are concerned, that change-over would

be reflected, as I recall, as of January 1st, 1934. This adjustment was made, of course, and would appear in your surplus adjustment which was referred to before. That would not affect any of the current year's financial statements down through.

Q. Did the Hope Company in its history make any other substantial changes in its accounting principles and methods?

A. I don't recall of any offhand.

* * *

## 1171 TESTIMONY OF HOPE WITNESS ANTONELLI ON ESTIMATED "ORIGINAL COST" OF HOPE'S PLANT

Transcript pages 1171–1271, 1325–1353, 5068–5104, 5107–5196, 5572–5658, 6250–6345

* * *

Cross-examination by Mr. SPRINGER:

Q. Will you please turn to page 5 of Exhibit 20. How did you determine what property to exclude, which you term "distribution and General, used solely for the distribution of gas in West Virginia?"

A. The properties to exclude for distribution, used solely for distributing gas in West Virginia were indicated to me by the company as such properties, and they were not included in this particular report.

* * *

1172 Q. And that was consistent with the property listed by Mr. Rhodes in his reproduction cost new estimate?

A. Yes, sir.

Q. Do you know what features of general property your did exclude as being used solely for the distribution of gas in West Virginia?

A. I believe some of the transportation and equipment was excluded, and there might be some others, that I could not tell you offhand.

Q. Were there any buildings?

A. Of course, the buildings in the various city plants were not included in our original cost estimates.

Q. What is the basis for your determination of items formerly charged to operating expenses and which should be re-stated as capital items, in your Exhibit 20?

A. Because, in order to determine the complete original cost, it is necessary to include all costs, regardless of how they were shown on the company's books.

Q. And what authority have you for that statement?

A. I was engaged to determine the complete original cost of Hope properties, and in order to determine the complete
1173 original cost it was necessary to include all elements of cost irrespective of how they were shown on the books of the Company.

Q. Are you familiar with the instructions in the Uniform System of Accounts for Gas Utilities, prescribed by West Virginia in 1939, Exhibit 13 in this case?

A. Yes, I am.

Q. Will you please turn to page 20, Account No. 100–1, "Utility Plant in Service" which reads:

"This account shall include the original cost of utility plant, included in accounts 301 to 390, together with the amounts recorded in accounts 391 and 392, owned and used by the Utility in its utility operations, including such property owned by the Utility but held by nominees."

Then will you please refer to page 48 under "Instructions—Utility Plant Accounts," and paragraph B reads:

"The cost to the Utility of its utility plant shall be ascertained by analysis of the Utility's records. In ascertaining the cost, it is not intended that any correction need be made for depreciation, depletion or amortization, applicable to operating units or systems previously acquired, whether or not such depreciation, depletion or amortization was recorded in the books of the accounting utility." It is likewise not intended that adjust-
1174 ments shall be made to record in utility plant accounts amounts previously charged to operating expenses in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts."

Does not that instruction forbid you to re-state as you have in exhibit 20, items which were formerly charged to operating expenses, that you have now capitalized?

A. We determined the original cost based on the accounting principle of the uniform accounts prescribed by the West Virginia Commission. And according to the definition given on page 5 for original cost, original cost as it applies to gas utilities, it means the cost of such properties to the person first devoting it to public service. Also on page 48, it states in paragraph C that if the original cost is not obtainable, it could be estimated.

It seems to me that paragraph B on page 48 is inconsistent with what the definition of original cost is stated to be and what is said in the paragraph C and we determined the original cost, the complete original cost, as I said, irrespective of the charge in the Company's books.

Q. Then your determination renders meaningless the specific part of Instruction B for Utility Plant Accounts, does it not?

A. Well, I think these instructions are inconsistent.
1175 I think there must be some mistake in stating that here. In one place they tell us to determine the original cost,

and if you don't know the original cost, it can be estimated. In another place you are told to record the cost as determined from the Company's books. It could not be original cost because, for instance, if we take the account of equipment or take the account of wells, the original cost of a well will be the cost of the equipment, plus the construction cost for sinking it. If we follow these instructions here, we go to the books and obtain only the cost of the equipment, because the cost of the construction has been expensed. I do not see how the cost of the equipment is the complete original cost of the well.

Q. You did not choose to follow the specific instruction for utility plant accounts, then?

A. No, sir; we followed the accounting principles.

Q. Are accounting principles supposed to be consistent? Is not one of the virtues of accounting claimed to be consistency?

A. I don't understand your question; I don't know what you mean.

Q. Is it consistent to charge to operating expenses and make financial reports based upon that discretion of the management——

1176 A. (Interrupting.) No, but ——

Q. (Continuing.) And then later restate those same amounts as capital items?

A. I was not doing an accounting job. I was determining the original cost of the property existing on December 31, 1938. I was not interested in bookkeeping or accounting practices of the companies at all. My job was to determine the original cost of the Hope properties.

Q. But you said you did it in compliance with the Uniform System of Accounts for Gas Utilities, prescribed by West Virginia.

A. I followed the accounting principles, yes.

Q. You followed accounting principles, but you did not do an accounting job?

A. No, sir. My job was to determine the correct original cost of these properties.

Q. Now, on page 6, you say that there was no system of accounts prescribed for the Hope Company prior to 1922. Does that mean that the Hope Company was not subject to regulation prior to 1922?

A. The Public Service Commission of West Virginia was organized in 1913 or 1914, and I believe that all of the companies

were required to furnish annual reports, because I have seen such reports. That is prior to 1922, so judging from that, I
1177 assume that they have been under regulation, but I am not not quite sure.

Q. On page 6 you state that the Hope Company did not capitalize well construction costs. How much have you restated in Exhibit 20 for that item?

A. The amount?

Q. Yes.

A. $11,279,554.08.

Q. And that amount was formerly charged to operating expenses, was it not, by Hope?

A. Yes, sir.

Q. Was the Hope Company involved in a rate case before 1922, do you know?

A. No, I don't know.

Q. And you don't know what the Hope Company contended for the treatment of well construction costs in its 1921 rate case then?

A. No, sir.

Q. And you are not aware of the fact that the West Virginia Public Service Commission stated in the 1921 Hope Rate Case that well construction costs was a proper operating expense for the purposes of that case?

A. No, sir.

Q. You stated that the Hope Company did not capitalize well construction costs. Was that an accounting discretion
1178 exercised by the management?

A. It must have been an accounting practice. In those days, I suppose that was the proper way to do it.

Q. Do you know who made the decision?

A. No, sir; I do not.

Q. Do you know that there are periods when non-capitalization of well-construction costs was practiced by Hope and when it was discontinued?

A. It was discontinued in 1923.

Q. And practiced from 1891 up to that time?

A. Yes, sir.

Q. And was the non-capitalization of well-construction costs the accepted accounting practice at the time it was employed by the Hope Company?

A. I believe that generally is correct.

Q. Some oil companies practice non-capitalization of well construction costs today, do they not?

A. That is my understanding, yes, sir.

Q. The Hope Company's decision not to capitalize well construction costs would affect its financial statements, would it not?

A. Yes.

Q. In effect, it would reflect less profit because the well construction was charged to operating expense?

1179 A. I would not know that.

Q. Doesn't it follow?

A. I don't know.

* * *

Q. Do you know what effect non-capitalization of well-construction costs would have upon the Hope Company's financial statements to the stockholders, regulatory bodies, and Federal and State taxing authorities and financial publications?

A. No, sir.

Q. The Hope Company's practice of non-capitalization of well-construction costs, you say, would affect its financial statements. It would likewise affect the consolidated statement of the Standard Oil Company of New Jersey, would it not?

A. I don't know. I have not given any thought to that.

Q. Are you familiar with the Federal Income Tax regulations, which require the Hope Company's officers to elect to

1180 treat well-construction costs either as operating expenses or as capital items?

A. No, sir; I am not.

Q. Do you know what election the Hope Company did make in connection with Well Construction costs for income tax determination?

A. No, sir.

Q. During the period when the Hope Company began capitalizing well-construction costs, did the Company's financial statements show the full effect of the changed accounting policy?

A. I don't know.

Q. Did you analyze the Hope Company's books from 1891 to the present time?

A. I analyzed the vouchers pertaining to the existing properties at December 31, 1938. As I said before, we had an inventory of all of the units in the Hope system, and my job was to determine the original cost, and I went to the proper vouchers and the proper company's books to determine the actual original cost. I was not interested in any of the company's bookkeep-

ing practices, as far as financial statements and so on were concerned.

* * *

1181 By Mr. SPRINGER:

Q. Then you did not make a complete examination of the books throughout the history of the Company?

A. I did, as far as the existing property is concerned: yes, sir.

Q. Did you consider all of the entries that related to the property in existence?

A. I considered all the entries that related to the costs of the properties in existence.

Q. But you do not know what changes were made by the Hope Company in its accounting procedure at the time it started to capitalize well-construction costs?

A. I was not interested in the accounting procedures of the company's. I determined the original cost of existing properties from the company's records.

* * *

Q. Mr. Antonelli, who made the decision that well-construction costs which were charged to operating expenses should be restated as capital items, in your Exhibit 20?

A. Well, I was asked to determine the real original costs of the properties, and I did so by going to the company

1182 records and finding the real costs of these properties. Nobody made the decision, as far as I was concerned, or as far as that is concerned. I had the general instructions to determine the complete original costs.

Q. Can we say in summary then, Mr. Antonelli, that you restated more than $11,000,000 for well-construction costs, which were charged to operating expenses, and you have placed them in capital now, without consideration to the specific instructions in the West Virginia System of Accounts?

A. Well, the only thing I did, as I said before, was that I determined the original costs, the complete original costs.

Q. On page 48 of the System of Accounts, you have rendered meaningless the instruction B, the last sentence: "It is likewise not intended that adjustments shall be made to record in utility plant accounts, amounts previously charged to operating expenses in accordance with the Uniform System of Accounts in

effect at the time or in accordance with the discretion of management and as exercised under such uniform system of accounts."

A. Well, if I had followed these instructions, I could not determine the real original costs.

Q. Why?

A. It just could not be done. The books do not record
1183 the complete costs. I had to go to other sources to get that cost.

* * *

Q. Was the effect of the Hope Company capitalizing the well-construction costs modified or nullified by concurrent additional accounting entries?

A. I don't understand the question.

Q. Well, is it not true that when a well construction job was closed, and charged to fixed capital, an additional entry was
1184 made charging operating expenses and crediting reserve for depreciation and depletion with an amount equal to the cost of well construction capitalized?

A. I did not pay attention at all to the Company's procedure, as I said before. My job was to determine original cost.

Q. Do you know whether the Hope Company, in its history, made any substantial changes in its accounting principles and methods other than those required by the various systems of accounts prescribed by the West Virginia Public Service Commission?

A. No; I don't know offhand.

Q. Were any changes in the Hope accounting principles and methods made without competent advice and authorization from responsible officers?

A. I don't know.

Q. Did not your analysis of the books reveal who the accounting officer was each year, and whether or not there had been determinations of principle and method by the management?

A. I was determining original cost. This was a job of going to the company's records and finding out how much should be charged as original cost, and that is all.

Q. Is the determination of original cost an exact science?

A. If all of the data and information is available, it would be an exact science.

1185 Q. In this case all of the data and information were not available, is not that so?

A. They were all available to the extent of 94 per cent. We estimated about 6 per cent.

Q. How many dollars does the 6 per cent amount to?

A. $4,000,000 or $5,000,000.

Q. Four or five million dollars?

A. Yes.

Q. Do you know whether the Hope Company has ever reclassified its property accounts before?

A. Do you mean since this Commission came into existence—since the West Virginia Commission came into existence?

Q. Well, no. From the beginning of the Hope Company's history.

A. Yes. In the beginning the Company had its property classified as perhaps ten accounts. Material prices were in one account, the labor was in another account, the compressing station, structures and equipment, were in the other accounts. Then in 1923, of course—No. It was reclassified once more, I believe, in 1913. The properties were reclassified as to production, transmission and distribution properties. Then they were reclassified in 1923 in accordance with the new classification of accounts of the West Virginia Public Service Commission. Then, there
1186 were some changes made in the classification of accounts in 1932—just minor changes. I believe the drilling and cleaning account was changed from "Production" to "General."

Q. What is the difference between the former reclassifications and your present one in Exhibit 20—fundamentally?

A. There are reclassifications as to the items of property and the general accounts have been reclassified considerably. In the prior accounts, the overheads, the so-called undistributed construction items, were all grouped together under several accounts. They were not distributed. In this case here, in this new system of accounts, they are all distributed with the items of equipment.

Q. Well, Mr. Antonelli, did the reclassification by the Hope Company in 1913 result in an increase in the total book cost.

A. I don't know. I could not answer that question.

Q. Did the reclassification in 1923 increase the total book cost?

A. I would like to make a correction. They reclassified the properties in 1920 and not in 1923. It did not increase it; no, sir.

Q. In 1932, did the reclassification result in an increase of the total book cost?

A. I don't think so.

1187 Q. Did the 1920 reclassification result in a decrease in the total book cost?

A. No, sir.

Q. Are the company records available to show the basis for the determinations made in the previous classifications?

A. It might be possible to obtain the information, but it would be a tremendous job and would take several years to do it, because properties have been abandoned and changed. It would be a very difficult job.

Q. Are the working papers available, underlying the former reclassifications?

A. You would have to go to the vouchers and other records to obtain the information. It would be a very difficult job to do.

Q. Did you have access to the working papers underlying the reclassifications formerly made?

A. I used them indirectly through vouchers. For instance, the reclassification made in 1920 was done through a memorandum voucher known as M-699, and we worked through that voucher considerably, to determine our original costs.

Q. Were there working papers supporting the memorandum vouchers?

A. Yes, there were a lot of vouchers, which all go back to this M-699 voucher.

1188 Q. Did you make use of those?

A. Yes, sir.

Q. Did you have available working papers summarizing all of the supporting vouchers in the former reclassification?

A. No, sir; I went direct to the original vouchers.

Q. Were those working papers available?

A. I did not need those papers to get my original costs.

Q. Well, they are in existence then, and available to the Commission's staff, I presume?

A. I presume they are. I don't know.

Q. You know they are in existence?

A. There are such papers; yes, sir.

Q. On page 8 of your exhibit, the caption, "Inventory of the Company's Properties as of December 31, 1938,—" did you make a check to determine whether the items of property listed in your inventory are used and useful in the Hope Company's Export business?

A. No, sir; I did not.

Q. Did you rely on someone else's determination?

A. The inventory as used in the original cost is the inventory of the properties existing at December 31, 1938, and recorded on

the Company's books, and I was instructed by the Company to include all properties so recorded, unless the Company advised me otherwise.

1189 Q. Who gave you the instruction?

A. The management of the Company.

Q. Would that be one person or several?

A. Mr. Chisler, who is the Vice President and Treasurer of the Company, and Mr. Cross, one of his assistants.

Q. In Paragraph B on Page 8, you say that your book inventory was checked account by account against all other available records. Could you tell us the general office and field office records which you used to check the book inventory account by account?

A. In the general office, we checked all of the records available in the Geological Department, such as well pockets and well cards. Information in the engineering department, such as surveys, line maps, and line pockets, and information in the district offices such as line pockets and all miscellaneous records.

Q. Did you make a check on the working papers under the previous re-classifications?

A. No, it was not necessary.

Q. Have all of those records been made available to the Commission's staff?

A. Yes, sir.

Q. On page 9, Mr. Antonelli, you state that substantially all visible property was verified by field inspection as to its
1190 existence and description. What dollar per cent does the visible property bear to the total property in the Hope system?

* * *

The WITNESS. The invisible properties consist of gas wells and pipe lines. They are the large items, and that represents about 7 per cent of the total properties.

By Mr. SPRINGER:

Q. You would say then that approximately 25 per cent of the property could be visually inspected?

A. Yes; the visible property, the visible properties.

Q. How much money is that?

A. About $55,000,000 original cost.

Q. And $55,000,000 could not be seen?

A. Could not be seen.

1191 Q. On page 9, you state that buried pipe was checked in the field by sampling method as to its existence and description. Would you describe the sampling method and the extent used?

A. This sampling method was done during the time the pipe was examined for condition, and as I understand it, the pipe was uncovered at equal intervals and examined.

Q. Just as Mr. Rhodes described?

A. Yes, sir.

Q. You relied on that?

A. Yes, sir.

Q. Would that furnish information as to the description of the pipe?

A. It will give the size of the pipe.

Q. And the length, of course, could not be determined by the sampling method?

A. No; we did not attempt to determine the length by the sampling method, no.

Q. I thought your statement was that you checked for description as well as existence?

A. Yes.

Q. And the length and size would be a description?

A. Through the sampling method we were able to determine the kind of pipe, whether it was a steel pipe, or a plain-end

1192 pipe, or what. In most of the cases—not in each case.

Q. The sampling method would not give you the complete answer, would it?

A. No, sir.

Q. Now, on page 9, you state that the book inventory was corrected to reflect only property in existence at December 31, 1938. Will you state the number of actual adjustments made to the book inventory by reason of the sampling method used for buried pipe, and the total effect in terms of dollars from those adjustments?

A. I could not do that. That is quite a job. I could prepare a statement.

* * *

Q. Were there numerous adjustments, Mr. Antonelli?

A. Yes, sir; there were. Some of them very minor, but there were adjustments.

Q. Both for inclusion and exclusion of pipe?

A. Yes, sir.

Q. Could you estimate the amount of money involved?

A. No, sir; I could not.

Q. On page 9, you state that in connection with the field
1193 field check of compressor station structures and equipment, you say use was made of an agreed inventory used in 1931 in the East Ohio-Cleveland Rate Case before the Ohio Commission. Do you know who made the 1931 inventory?

A. That inventory was prepared by Ford, Bacon & Davis.

Q. Was it a complete physical inventory?

A. It was a complete physical inventory, as of December 31, 1931.

Q. Can a physical inventory be made of the Hope system?

A. I am referring now to compressing stations, structures and equipment.

* * *

Q. On page 9, do you have the schedules which reflect additions and retirements to 1938, which have been applied to the 1931 inventory?

A. Yes, I have, and a copy of those schedules was furnished to the Federal Power Commission.

Q. To whom?

A. Mr. Lyons.

Q. On page 9 again, Mr. Antonelli, you state that additions and betterments from June 30th, 1931 to December 31, 1938, occurred in the field. How was that field check accom-
1194 plished?

A. By visiting each station and checking each item individually. The items that were not found there were retired, and other items that were found and not recorded in the inventory——

Q. (Interrupting.) Do you mean that you can go out in the field and look at property and tell whether there is an addition or a retirement involved?

A. By "addition" and "retirement" I mean we added additional items and retired others.

Q. Were you able to distinguish from former additions and former retirements?

A. I don't understand what you mean by "former additions and former retirements."

Q. Did you say you looked at the property in the field?

A. Yes, sir. All of the visible property was examined.

Q. Well then, how can you distinguish your additions and retirements from ones that were formerly made?

A. I don't understand what you have in mind. We had an inventory as of June 30th, 1931. This inventory was taken out in the field and checked, item by item. If we did not find the items in the field as recorded in our inventory, of course, we retired that item.

The TRIAL EXAMINER. You had an inventory of each
1195 compressor station, you mean?

The WITNESS. Yes, sir; of each compressor station. If we found an item in the field that was not recorded on our inventory, it was added.

Mr. MILDE. By "retired" you do not mean retired in an accounting sense, do you? I think that is where the difficulty is.

The WITNESS. No, sir; I mean it was eliminated from our inventory.

The TRIAL EXAMINER. You mean it was not there when you went back?

The WITNESS. That is right. It was not there when we went back in 1938 and 1939. It was there in 1931.

Mr. COCKLEY. Then you took it off your list?

The WITNESS. Yes; we took it off the list.

Mr. COCKLEY. And if you found something there that was not on your list, you put it on?

The WITNESS. Yes; that is the way we did it.

Mr. COCKLEY. And of course, you could not put anything on but a bare description of the equipment?

The WITNESS. That is all that was necessary, to put the description on so that we could identify it from the Company's books and vouchers.

By Mr. SPRINGER:

1196 Q. Did you reconcile that information with the book cost then?

A. Yes, sir; at the time that we went in the field, in addition to the 1931 inventory, we also had with us a transcript of the inventory as shown on the Company's books, and those two inventories were reconciled.

Q. You mean they were reconciled as to the existence of the units of property, or the dollar basis?

A. As to the existence of the units of property.

Q. Should there not be a reconciliation of the related dollars to the units of property added or retired?

A. The books do not reflect the complete original costs. It records only the book costs. We did not pay much attention to the dollars as shown on the books because they were not complete.

Q. You had a total dollar amount and you fitted what you call a check inventory into it without relating dollars to the units of property, is that right?

A. No, we prepared an inventory, and then we went to the Company's records, not only the Company's ledgers, but all of the Company's records, and we went back into the vouchers and found the actual costs of the amount of money that the Company actually spent to construct these properties.

Q. Are the Company's records adequate to enable you
1197 to determine the total cost to the company of compressor stations?

A. Yes, sir.

Q. Will you please refer to the last paragraph on page 9. What is the original source of the inventory of the pipe lines you mention there?

A. The inventory of the pipe lines was a transcription from the company ledgers checked against the information and data shown in the engineering department, and what is shown in the various districts, line pockets, and so on, and also survey maps and survey plats. Of course, they were spot-checked out in the field to determine their accuracy.

Q. Who determined when it was necessary to confirm the accuracy of the inventory data on hand?

A. I did. I made sure that the inventory was as accurate as humanly possible.

Q. Would you please describe the extent and nature of the new surveys which were made to confirm the accuracy of the pipeline inventories?

A. We prepared a list of all lines, line by line, and our first job was to go out in the field in each district and have all of the line-walkers come in, and we discussed the existence of these
lines. That was our first step. For instance, I would
1198 ask a man, "Do you know anything about a certain line?" and he would say "Yes, this line is still there." And I would ask him, "How long is the line?" and he will say, "1,000 feet." If he said it was four miles, I knew that there was something wrong. So that was our first check. Then a discrepancy of that kind was checked in the field by actual measures.

The next check was by setting out on parallel columns the inventory lines as shown by the engineering department and as shown by the treasurer's department, and the discrepancies were noted, and if it could not be explained, they were checked out in the field by actual measurements.

We also checked the inventories with the surveys made by the engineering department and line plats. When a line is laid, there is a plat prepared showing the length of the line and the kind of the line, the beginning point and the end.

Q. And how can you make an actual measurement of a pipe line?

A. By measuring the line with a chain.

Q. With a chain on top of the ground?

A. Yes.

Q. Do you penetrate?

A. No; you just follow the line.

Q. Could you tell us how many miles were measured that way?

1199 A. I am not quite sure, but I think it was about ten or fifteen per cent.

Q. Of the 4,000 miles?

A. Yes, sir. It was not necessary to measure all of the lines where we were certain that the inventory was correct. We measured all of the lines on which we were in doubt.

Q. And you say that that was about 15 per cent of the 4,000 miles of pipe lines?

A. Offhand I would say that is correct. I would have to refer to my papers to find the correct amount.

* * *

Q. Could you have the papers here late today and give us the correct answer on that?

A. Yes, sir.

Q. Will you please turn to page 10 of Exhibit 20 and referring to paragraph D, were you able to identify in the transcription of investment ledgers, the specific units of physical property shown in the new inventories made in the field as of December 31, 1938?

A. In most cases, we did. In some of the general accounts, particularly in the shop equipment, we were unable 1200 to identify the items found in the field with the items shown on the company's ledgers, but of course that is only a very small portion of the properties involved.

Q. In the case of pipe and fittings at a compressor station, if you could not find it at the time of the field check, did you put it under construction labor and class it as supplies expended during construction?

* * *

The WITNESS. I will have to refer to my papers to answer that question.

By Mr. SPRINGER:

Q. And on page 10 again, what is the dollar amount of your adjustments, in connection with the property no longer in existence which was still carried on the company's books?

A. Again I will have to refer to my papers, Mr. Springer. I could not answer that question offhand.

Q. You would not know the dollar amount of your adjustments in connection with property found by field check which had not been recorded on the books?

A. No, sir, that would be a big job to determine.

Q. Was it a large amount?

A. I would not say so; no, sir.

* * *

1201 Q. The Trial Examiner and the Federal Power Commission would not be expected to get the answer that way, would they?

A. Of course, in order to get the answer to these questions, it would require me to go over 70,000 pages and summarize them. It is a tremendous job, because they are shown by units of property. They are all there and all explained, and the reasons why the adjustments were made.

Q. You did not make any summaries for your own information?

A. I have the adjustments shown on this statement B.

Q. You do not know how much property you added to that inventory which was in existence which did not appear on the Company's books?

A. Not offhand; no, sir.

Q. Your working papers won't show that in summary form?

1202 A. Yes, sir; Statement C gives the various kinds of adjustments, but not as specifically as you would like to have them.

* * *

1205 Q. Mr. Antonelli, referring again to the dollar amount
1206 of your adjustments in connection with property no longer in existence which was still carried on the company's books, do you consider that important information?

A. No, sir.

Q. Now, in considering the dollar amount of your adjustments in connection with properties found by field check, which had not been recorded on the books, do you regard that as important information?

A. No, sir; there are not many such properties.

Q. And did you state the amount of money involved in these adjustments?

A. I stated the inventory adjustments, and I also stated the amounts involved reduced the original cost $449,042.39. That is a reduction to the original cost.

Q. That is a net figure?

A. Yes, sir; it is shown on page 34, statement C.

Q. Then there are other columns involved too, aren't there, such as material and labor costs, unloading and hauling, and warehouse handling?

A. Those are a different type of adjustments. I am referring now to the inventory adjustments only.

* * *

1208 Q. Mr. Antonelli, referring to column 6 on page 32 of your exhibit, you have used net figures there, have you?

A. Yes, sir; I did.

Q. And the working sheets do not show the dollar amount of adjustments in summary form, do they? The total dollar amount?

A. The working sheets will give you the total amounts for each account as it appears in statement C.

Q. You have stated that it was net and your working papers do not show the total gross.

A. The working papers show in detail each item added or retired in the inventory, and this is the result of the additions and retirements. The net figure is shown in the statement C, account by account.

The TRIAL EXAMINER. Does it show how you arrived at each amount as related to the original books?

The WITNESS. No. For such information it would be necessary to go back to the working sheets. It does record the amounts added and retired, item by item.

* * *

1209 Q. You have stated, Mr. Antonelli, I believe, that the dollar amount of your adjustments, in connection with property no longer in existence, which was still carried on the
1210 Company's books, was not important?

A. Not as far as dollars is concerned.

Q. Well, what do you mean? That $1,000,000 is not important?

A. I would not say that it was $1,000,000. It was not $1,000,000.

The TRIAL EXAMINER. Is it half a million dollars?

The WITNESS. I am not quite sure, but it is less than half a million dollars. I would have to look it up, because I cannot remember the figure.

By Mr. SPRINGER:

Q. In reference to the dollar amount of your adjustments in connection with the property found by field check, which had not been recorded on the books, you said also that you did not think that was important. Is that a million dollars?

A. Oh, no; it is a small amount. I am not sure—I don't know how much, but it is not a million dollars.

Mr. SPRINGER. Mr. Examiner, we renew our request for the tabulation showing the dollar amount of adjustments in connection with property no longer in existence which was still carried on the Company's books, and the dollar amount of adjustments in connection with property found by the field check, which had not been recorded on the books?

* * *

1212 Q. Would it require much work to prepare that tabulation?

A. After you see these work sheets, perhaps you will be satisfied with what we have. I believe they will show just what you wish.

Q. You will be able to testify to it from your sheets then?

A. I think so.

Q. Please refer to page 10 of your exhibit. How could property exist that was not recorded on the Company's books?

A. There is a lot of property that is not recorded on the Company's books and still it is in the field and owned by the Company.

Q. Does that mean that the property was in existence but it did not show in the plant accounts, and probably has been charged to operating expenses?

A. What property do you have in mind?

Q. How does property exist which does not show on the
1213 Company's books? What causes that? Is that an omission?

A. No; it might be that during the re-classification of accounts, certain properties were missed, or it might have been charged to expenses, although only a small portion of the properties are charged to expense.

Q. You mean the former reclassifications, do you not?

A. Yes; I mean the former reclassifications.

Q. Of 1929 and 1932?

A. Yes; sir.

Q. On statement B at page 31, you show the restated original cost of operated leaseholds, gas rights and royalties, totalling $1,684,635. Will you state the amount which was added to book costs to get that result?

A. The amount added to the books to get that result would be the difference between $1,684,635.98 and $1,331,100.55.

Q. Will you explain in detail how you determined the original cost of operated leaseholds, gas rights and royalties for each of the columns across page 31?

A. Column 4 was obtained from the financial statement. That is the amount shown in the financial statement for operated leases.

Column 12 was determined by adding the costs to the Hope Company, exclusive of the expense items and overhead, of the first lease acquired from other utilities.

1214 Column 5 was obtained by subtracting Column 12 from Column 4, and it is not supported by detailed leases adding up to the total of the column. This column was just a balancing figure.

Column 6 is the difference between the original cost of the leases and the book cost as shown on the Hope Company's financial statement.

Q. Column 6 is the difference between the figures and what other columns on page 31?

A. Column 5 plus column 6 plus column 12 and less column 4 will give you column 6.

The TRIAL EXAMINER. Will you repeat that answer, Mr. Reporter?

(The answer is repeated.)

The WITNESS. It is the original cost—it is the difference between the original cost of the leases, which is column 5, column

6 and colun 2, less the cost capitalized on the company's books of column 4, and that will determine the original cost of the leases to be $1,583,852.73 and the cost capitalized on the books is $1,331,100.55. The difference represents the inventory—no; it represents the adjustment, which is $252,752.18.

By Mr. SPRINGER:

Q. Is that sum of $252,752.18 under column 6 also a
1215 balancing figure?

A. No; that is an adjustment that had to be made on the books, in order to obtain the adjusted book cost of the operated leases.

Q. Is that supported by detail of the leases?

A. The detail? The total original cost is of the operated leases and is supported by detailed vouchers.

Q. Is the amount of $252,752.18 in column 6 supported by detailed leases?

A. That is only an adjustment.

Q. It is a balancing figure, is it not?

A. Well, you might call it a balancing figure. The original cost of the operated leases is $1,583,852 and the leases on the books are recorded at $1,331,100. The difference had to be shown under an adjustment, and that represents the $252,752.

Q. Will you explain how you determined direct material and labor costs not capitalized for operated leaseholds, gas rights and royalties?

A. I don't understand your question.

Mr. SPRINGER. I will ask the Reporter to repeat the question.

(The question is repeated.)

The WITNESS. Well, the leasehold consideration has
1216 always been capitalized, and only cost of obtaining for the years prior to 1921 were expensed, and also some of the recording was expensed, but most of the leasehold costs were capitalized. The items that were expensed were determined by ascertaining how much the company actually paid for such leases through vouchers and Company records.

By Mr. SPRINGER:

Q. Could you tell us how you arrived at the $64,398.61 in column 7 for direct material and labor costs, not capitalized, relating to operated leaseholds?

A. This amount comprises the cost of obtaining—and by the cost of obtaining, I mean the cost of the agent going out in the

field to acquire leases. I think it also includes certain recording charges. In some cases we were able to find the actual costs through vouchers. In other cases part of this $64,000 was estimated on the known costs of the other leases. By that I mean we knew how much it cost to obtain a lease by study of 3,700 or 3,800 leases, and we used that cost to estimate the cost of the leases that we did not know.

Q. Were the conditions comparable during the period that you have stated, to the test costs, which you used in your estimates?

A. This cost of obtaining price which we used as an estimated price, was based on leases purchased or acquired after 1217. 1921, and was used for the cost of obtaining Hope Company leases purchased prior to 1921. Although the wages paid by the Hope Company after 1921 were higher than prior to 1921, the transportation after 1921 was very accessible, and offsets the difficult transportation prior to 1921. The means of going from one place to another to see the various farm owners was not very good prior to 1921, and it took three or four or five times as long to reach a farmer prior to 1921 as it did after 1921.

Q. Now, Mr. Antonelli, will you please refer to the unoperated leases, gas rights and royalties, on page 31, with the restated original cost $681,882 and state the amount which was added to the book cost to get that result?

A. We had to add the amount shown on column 6, namely $104,881.48.

Q. Is that a balancing figure?

A. You may call it so. It is an adjustment figure.

Q. What is your description of an adjustment figure?

A. It is the difference between the original cost and the book cost, in order to balance with the books in column 4, we had to show this adjustment in the next column. It does not mean anything, as far as that is concerned—it is just an adjustment figure. It was shown just for the purpose so that we could balance with the Company's books, and it really has no
1218 effect on the original cost whatsoever.

Q. Now, will you please explain in detail how you determined the original costs for each of the other items of cost at page 31 for unoperated leaseholds, gas rights and royalties?

* * *

A. It was determined from the Company's records and vouchers.

Q. Starting with column 4.

A. It would be exactly the same way as I described it for the operated leases.

Q. On page 12, you state that all actual material and labor costs of the property in existence in 1938 which had been charged to expense were recorded on the original cost sheets. How did you determine the actual material and labor costs?

A. The actual material and labor costs were ascertained by finding out exactly how much money the Company spent
1219 in constructing these properties. It is the actual cost that the Company spent for constructing these properties, and it was determined from the Company's vouchers and the Company's records.

Q. Were you able to find all of the vouchers required for your actual determination of the materials and labor costs?

A. I was not able to find all of the vouchers, but I was able to find vouchers to the extent of 93 or 94 percent of the original costs of the properties, as I stated before.

Q. And then you estimated the remainder?

A. I estimated the remainder, based on the Hope Company's costs for constructing similar properties under similar circumstances and for like periods.

Q. Of the vouchers you did find, what method did you use to identify any operating expense costs relating to the costs of existing properties?

A. I don't understand your question.

Q. Was it possible for you to tie the existing property up with the old vouchers which were recording these items as operating expenses?

A. I still don't understand it, but what I did in connection with the items that were charged to operating expenses—I went to the Company records——

* * *

1220 The WITNESS. I went to the Company records and the Company vouchers, and determined the actual costs of these items, irrespective of the charge to capital or expense.

The TRIAL EXAMINER. The voucher in each case did not cover the particular expense that you were looking for, did it?

The WITNESS. Yes, sir; each item was identified by a voucher, and my job was to find the particular voucher and identify it.

The TRIAL EXAMINER. The voucher covered only that expense and nothing else?

The WITNESS. Yes, sir. The voucher for each item of equipment and each item of expense.

By Mr. SPRINGER:

Q. Was the voucher sufficiently complete to enable you to identify the unit of property existing today and relate the expense to that unit of property?

A. Yes, sir.

Q. In every case?

A. In most cases. For instance, if I am looking for
1221 the cost of this table [indicating], the table is numbered, and I go to the voucher and look for this number and look for the description of this table, and that is the cost of this table.

The TRIAL EXAMINER. That would be the cost of the table alone, without respect to any labor or hauling or freightage or anything else which expense might have been incurred in connection with that table. Would that same thing apply to freight on the table, for instance, haulage on the table?

The WITNESS. Yes, sir.

The TRIAL EXAMINER. Or labor on the table?

The WITNESS. Yes, sir.

The TRIAL EXAMINER. You would find a separate voucher for each of those items?

The WITNESS. Yes, sir.

By Mr. SPRINGER:

Q. On page 12, Mr. Antonelli, it is true that the direct cost of the materials and labor totalling $13,580,814.33 which you have added to the book cost of the property were formerly charged to operating expenses?

* * *

1222 The WITNESS. Yes, sir, that is true.

By Mr. SPRINGER:

Q. When was the practice of capitalizing direct costs of material and labor begun by the Hope Company?

A. For certain accounts, the Company capitalized labor from its inception. For gas well construction, of course, they did not capitalize until later on in 1923. For certain of the pipe lines prior to 1907, the labor was not capitalized. The labor for transmission lines and main lines was always capitalized.

Q. What is the basis for your determination that the items formerly charged to operating expenses should be restated as

capital items which you have described as direct material and labor costs not capitalized?

A. Well, this was done in order to obtain the complete original costs. The true original cost.

Q. Under the instructions of the Classification of Accounts of the State of West Virginia for 1939?

A. Under the accounting principles of the classification of accounts.

Q. Regardless of the former decisions of management to
1223 account for these items?

A. (No answer.)

Q. Haven't you said that you did not care how they accounted for them formerly?

A. Yes, sir.

Q. But you were out to determine the original cost, under your conception of what that means?

A. I was out to determine the true and real original cost of this property.

Q. Pardon me, Mr. Antonelli. Will you please refer to page 31 of your exhibit. I did not mean to interrupt you when you were telling when the Company started to capitalize direct material and labor costs for each of the classifications of the property listed on that page. You have explained some of those; will you continue now?

A. Shall I begin on Account No. 300-1 and go down?

Q. If you will, please.

A. Land was always capitalized by the Company, and the only items that were charged to expense were certain abstracting costs. It will be very hard for me to give you a definite answer for each account, but generally speaking, materials were always capitalized. Labor for compressing station equipment and structures was always capitalized, except, I believe for the years 1918
1224 to 1922. That is true for field lines, although certain lines prior to 1907, the labor was not capitalized. Certain of the rights-of-way costs such as the cost of obtaining was not capitalized prior to 1920. I think that about covers everything.

Q. Was it the discretion of the management to account for those items in the manner that you have described?

Mr. MILDE. I object to that. How can he testify as to what the management thought back in those times? He was not there twenty or thirty or forty years ago. What do you mean by your question?

The TRIAL EXAMINER. What do you mean by "Within the discretion of the management?"

By Mr. SPRINGER:

Q. Well, some decision had to be made, Mr. Antonelli, did it not, as to whether they should be capital or expense items?

A. I was not interested in that. I said that before, that my job was just to determine the original cost, the real original cost, irrespective of what the company did in the past.

Q. Then your answers would be the same relating to the costs of material and labor and the accounting of the Company as they were for the item of well-construction costs, when I asked
1225 you about intentional and informed accounting, during the history of the Company?

A. Yes, sir.

Q. On page 12, you state that you made an analysis of the costs experienced by the Company in what you term unloading, hauling and warehouse handling costs, and indirect field costs. What period of time did your analysis cover?

A. It covered from the beginning of the existence of the Company up to 1938. It covers the entire period of the Company's existence.

Q. On page 38, don't you talk about dress rehearsals?

A. Yes, sir.

Q. Field performances for unloading, hauling, and warehouse handling, were determined by rehearsals?

A. Yes, sir.

Q. What instructions were given to the men who played the parts in that case?

A. There were no instructions given. I sent one of my men that is familiar with warehousing handling, unloading, and hauling, and he spent several months going from one warehouse to another warehouse, interviewing all of the present employees, the past employees, going through the Company's records, and checking certain information, and also making time studies as to what was done in that time.

Q. What check did you make to determine that the con-
1226 ditions for the dress rehearsals were comparable to those twenty or thirty or forty years ago when the work was actually performed?

A. Well, these so-called dress rehearsals were comparable to those times when the thing was done twenty or thirty years ago.

with the same conditions, as much as possible, naturally, but that was all one part of the study that we made. We took several months in determining this unloading and hauling and warehouse handling.

Q. Mr. Milde said that you were not here twenty or thirty or forty years ago.

A. The records are here, and we have analyzed the records. We have talked to various employees, that were here twenty years ago. We have their names, and we know exactly what they did, and I am very sure that we obtained very accurate information affecting these types of costs.

Q. Will you please refer to page 38 of your exhibit. What were the available costs from the Company's records which you say substantiated your unloading pipe costs used in this exhibit at your dress rehearsal?

A. The pipe bills and payroll records and tally sheets.

Q. And how did they substantiate that?

A. If we found through actual field investigation that it cost, say fifty cents a ton to unload pipe, then we go to the
1227 records and find that it is about the same, and so we find that the men that gave us that information told us the truth.

Q. Will you please refer to page 12 of your exhibit and state whether the actual costs of unloading, hauling and warehousing and handling for property constructed and purchased as non-operating units by the Hope Company, were formerly charged to operating expenses?

A. If I understand your question, we did not include any unloading, hauling and warehouse handling of properties purchased from non-utilities.

Q. As non-operating units?

A. Yes, sir.

Q. Were the actual costs of unloading, hauling and warehouse handling for property constructed by the Hope Company formerly charged to operating expenses?

A. They were formerly charged to operating expenses, yes, sir.

Q. Then on page 32 of your Exhibit, that means that $383,454.28 has been added to the book costs as an estimate of the unloading, hauling and warehouse handling costs?

A. $383,454.28, yes.

* * *

1228 Q. And none of that related to properties purchased from non-utilities as non-operating units?

A. May I correct my previous statement, please? This amount was added to our original costs to determine the correct original cost. It was not added to the books; it was added to our original costs. It is part of our original cost.

Q. And what is your original cost?

A. The original cost is $70,000,000 which we determined for the original costs of the Hope Company properties.

Q. What do you mean when you say that you have added it to your original costs?

A. It is part of the original cost.

1229 The Trial Examiner. You do not mean you added it to that $70,000,000, do you?

The Witness. No, I do not. It is part of the $70,000,000.

The Trial Examiner. What did you add it to to make the $70,000,000? I think that is what he is trying to find out.

The Witness. This $383,000 was added as the unloading, hauling and warehouse handling of the casing and tubing and the pipe that went into the construction of the field lines.

The Trial Examiner. That is what it was added for?

The Witness. It was added for the costs of unloading and hauling and warehouse handling of the pipe. It was not added to the book cost.

The Trial Examiner. What was it added to?

The Witness. It was added to the material for casing and tubing and pipe lines and field lines.

Mr. Milde. Material costs.

The Witness. Material costs.

By Mr. Springer:

Q. Was it added to the $49,000,000 amount in column 5, page 32, which is captioned "Per books?"

A. No, sir; it was added to the material costs as determined by us to be the original costs of our casing and tubing and field line pipe.

1230 Q. What was your starting point for the determination of that term original cost?

A. My starting point was to find out the amount of money the Company actually spent for material and labor for unloading and hauling and warehouse handling charges, and the indirect field costs and overhead costs, which gave me the complete cost, the complete original cost of the Company's properties.

Q. How did you do that?

A. I did it, as I have already explained, by analyzing the Company's records and vouchers and so on, and digging in the records which I found.

Q. Well now, Mr. Antonelli, does the original cost statement that you have made have any relation to the book cost?

A. No, sir; the book cost is shown here only to show you what is shown on the books, and of course, to show the adjustments and where we found the costs, how much of it was capitalized and how much was expensed. I wanted to make a job that would be clear to everybody and that would show just exactly where we got the information. And at the same time, to tie it up with the books.

The TRIAL EXAMINER. The purpose of putting the book cost in this exhibit, then, was to relate the book costs to your results?

The WITNESS. Yes. We started with the book cost, and
1231 they made certain adjustments to it, and then we added some other costs which we found.

The TRIAL EXAMINER. Actually you did not do that? You did not start with the book cost, other than to just make a record of the book costs, and then you went ahead and made a separate determination?

The WITNESS. I started it with an inventory. On the first column of the inventory, I showed what was shown on the books for each item separately. Then on the next column I showed the adjustments upwards or downwards, whether I had to increase the book costs or decrease the book costs.

The TRIAL EXAMINER. That was simply to relate your results, as I say, to the book costs?

The WITNESS. Yes, sir.

By Mr. SPRINGER:

Q. You started with book costs?

A. I started with book costs, yes, sir; in most cases.

Q. And is your so-called original cost classification an appraisal of the Hope System properties?

A. Oh, no. This original cost is the cost of the property, the actual cost of this property.

Q. What is your definition of "original cost?"

A. My definition of original cost would be the full cost of constructing the properties involved.

1232 Q. Is that the basis for your original cost figure?

A. No; this definition was modified to agree with the definition given on page 5 of the new Code of Accounts pre-

scribed by the West Virginia Commission, namely, that the original cost as applied to gas utilities, means the cost to the person first devoting it to the public service.

Q. And what are the elements of that cost?

A. I don't understand what you mean.

Q. Does it include labor and material?

A. It includes the full costs. It includes the labor and the material and any other charges and expense which might have been incurred in connection with the construction of the properties.

Q. You have restated, have you not, Mr. Antonelli, in your original cost statement, items which were charged to operating expenses since 1923, for example, that you have now capitalized?

A. Since 1923?

Q. Yes.

A. I cannot answer that question offhand, but I know that I determined the original cost, and if the Company has expensed certain items since 1923, I have not paid any attention to them. I determined the original cost, irrespective of what the Company did.

Q. Well, as a matter of fact, you have capitalized items
1233 which the Company, since 1923, has charged to operating expenses, haven't you?

A. It is possible, but such items would be very small in amount.

Q. Well, it has actually been done, hasn't it? What do you means by "a small amount?"

A. It might be a small structure expensed by the Company. For instance, a gate-house costing $50. or $60.

Q. That is contrary to the instructions of the West Virginia system of accounts, is it not, which says that it was not intended that items formerly charged to operating expenses should be capitalized?

Mr. MILDE. I object to that. It does not say that.

Mr. SPRINGER. On page 48, in Section B.

The WITNESS. As I said before, I determined the complete original costs of the properties, regardless of paragraph B on page 48.

By Mr. SPRINGER:

Q. You ignored that instruction?

A. Yes, because it is inconsistent with what is stated in Paragraph C and inconsistent with the definition of original cost.

Q. Why do you think that it is inconsistent?

A. Because the definition of original cost was interpreted
1234 by me to mean the full original cost for construction of the property, and also in Paragraph C, page 48, it states that if the original cost is not available, it could be estimated.

Q. How does that change the specific provision of the items formerly charged to operating expenses, that they should not be capitalized?

* * *

Q. Mr. Antonelli, did you not state on page 5 of your exhibit, that under the new uniform system of accounts of West Virginia, it was required to state plant accounts on the basis of original costs of the property?

1235 A. Yes, sir.

Q. And have you made your original cost statement in conformity with the instructions and prescriptions in that uniform system of accounts?

A. I made it in accordance with the accounting principles set forth in the new Code of Accounts.

Q. What do you mean by the "accounting principles?"

A. Well, I reclassified the properties in accordance with this new Code of Accounts, and showed the material and labor for each item of property in connection with this new Code of Accounts and determined the original costs of the properties.

Q. Were any interpretations required before you could undertake your work?

A. Required from whom?

Q. Any interpretations of the principles of accounting which you say you relied upon?

A. Well, I interpreted it to mean that in order to determine the original cost of the properties, I had to determine the full costs.

Q. Have you stated in your qualifications that you were an expert accountant?

A. What do you mean by an accountant?

Q. Are you a Certified Public Accountant?

1236 A. No, sir; I am not.

Q. Have you ever been an auditor?

A. What do you mean by an auditor? I don't understand just what you mean by an auditor.

Q. Have you an accounting degree, that you have been trained in the science of accounting?

A. No, sir.

Q. And you did not need any accounting advice to assist you in making your determinations of how to make an original cost study based upon what you call the principles in the West Virginia system of accounts?

A. I had as many as 180 men working on this job. We had engineers and accountants and clerks.

Q. Did you receive accounting advice on the principles or the interpretation of the uniform system of accounts?

A. I did; yes, sir.

Q. From whom?

A. By reading this new Code of Accounts, and from various accountants that worked under me, and also from the Company.

Q. Who in the employ of the Company advised you in the principles of accounting?

A. Various employees. Mr. Cross, Mr. Chisler.

Q. And you accepted their advice, I take it?

A. Yes, sir; I did. May I say that this determination of
1237 original cost is more than an accounting job? Before you prepare the original cost, you have to prepare an inventory and you have to know what is in the inventory, and then the man that works on this original cost must know costs. An accountant knows figures but not costs.

* * *

1253 Q. Did you state earlier in your testimony that the determination of the original cost is an exact science?

A. I said it would be an exact science, if it is possible to find the actual cost on the Company's books and records.

Q. Is that an accounting or an engineering problem?

A. It is both. You have to know the items and you have to know the costs. I personally think it is more of an engineering problem than an accounting problem, and my experience in the last twenty years has been that original costs prepared
1254 under the direction of an engineer are the more accurate original costs, because the engineer knows what he is talking about so far as the physical property is concerned.

The TRIAL EXAMINER. He may not know what the accountant is talking about, as far as the books are concerned?

The WITNESS. I was not interested in the books; I was trying to find out the original cost. Here is a chair, and I was trying to find out how much the chair cost. It is a detective job, really, to go to the books and find out the cost of the chair and identify it, and so that I can prove to somebody that the cost of this chair

is $10. That is what we did. I was not interested at all in the way that the Company kept their books or what their practices were.

By Mr. SPRINGER:

Q. Please turn to page 12 of your exhibit. How did you determine the indirect field costs in your study?

A. The method followed is described.

Q. Is that on page 39?

A. It is on page 39, I believe.

Q. And on page 39, you say that present and former superintendents were interviewed, in order to learn actual account of the average time spent in the previous field construction. Did those superintendents have written records of their time spent on construction, or did they rely on their memories for
1255 this thirty or forty year old information?

A. They relied on their memories. If they had written records, of course, I was going to use them, but there were no such written records.

Q. And you relied solely on their memory of conditions forty years ago?

A. Well, those men, doing the same work year after year, they know very well how much time they spent in connection with the construction of pipe lines or drilling wells, and so forth. It is a very easy matter for them to give me a correct picture of the time spent in constructing properties.

Q. The men you interviewed have not been employed in that task for forty years, have they?

A. No, sir; I interviewed all of the men from the beginning up to 1938, all of the men that were available and still living.

Q. Of the men available, were there any who had supervised field construction forty years ago?

A. No; but many supervised field construction for a long time, and those men are men that grew up in the business, and they know how much time is necessary for supervision, even before they began supervising.

Q. And did you make a check of your determination to see whether it was in compliance with the cost of supervising field construction twenty to forty years ago, when it was
1256 actually performed?

A. Well, the costs that were determined as applicable to those dates, are not applicable to the supervision of today. These costs vary year by year, and it was so determined.

Q. Now, did you determine in 1938 what the cost of supervising field construction was in 1915?

A. We determined the salaries and expenses of the men that supervised the work in 1915. There was no trouble about that. We had that directly.

Q. You mean that field supervision and construction——

A. (Interrupting.) Yes, sir; name by name. I have the names of the men who supervised the work in 1915, down to the time-keeper, and I also knew and determined from the men that really did the work in 1915, how much time they spent in supervision. There was no trouble at all to determine the cost.

Q. Do you remember that man's name?

A. Oh, yes; I have several—not one man's, but I have several men's names. It may be twenty or thirty or it may be as many as fifty. We spent months doing this work. We visited every district and interviewed every man and reviewed all of the pay-roll vouchers and pay-roll books.

Q. And were the actual indirect field costs for the properties constructed or purchased from nonutilities or from other
1257 utilities, which not operating units of the system, formerly charged to operating expenses?

A. I don't understand your question.

Mr. SPRINGER. I will ask the reporter to repeat the question.

(The question is repeated.)

The WITNESS. The original cost did not include indirect field costs for such properties.

By Mr. SPRINGER:

Q. Does the indirect field costs which were actually incurred for the property constructed by the Hope Company, were they formerly charged to operating expenses?

A. Yes, sir; they were.

Q. Do you mean, Mr. Antonelli, that the only addition in your original cost statement of indirect field costs was made to property constructed by the Hope Company?

A. We also added indirect field costs to properties constructed by other utilities.

Q. You mean that it covered the properties purchased by the Hope Company from other utilities as an operating unit?

A. Yes, sir.

* * *

1258 Q. Mr. Antonelli, you stated that the Hope Company in the past has charged indirect field costs to operating expenses?

A. Yes, I did.

Q. And I assumed that that was intentional accounting on the part of the company?

A. I don't know what was the company's intention.

Q. Well, it was a fact, was it not, that you found that they had practiced the expensing of indirect field costs?

A. They were charged to operating expenses.

Q. And could you tell us for what period they were charged to operating expenses?

A. No, I could not. But I would like to make a statement that we are referring now to just certain accounts, and not
1259 all of the accounts. We are referring to gas wells and field lines. For the other accounts, the Company has charged indirect field costs direct to the properties.

Q. Do you know whether that was done since 1922?

A. I would say offhand; no, sir.

Q. You have added to your book costs an estimate of overhead costs totalling $2,866,414.26 for property constructed or purchased from nonutilities or as nonoperating units, haven't you?

A. I have not added anything to the book costs. I determined the original costs, and this amount represents the overhead.

Q. On page 13 you state that to determine the original cost of the company's properties in accordance with the accounting principles set out in the West Virginia system of accounts, it was necessary to determine the overhead costs in connection with construction and acquisition of properties. Now, referring to the West Virginia system of accounts, page 55, plant construction, No. 6, will you please read that into the record?

A. You mean as to overhead construction costs?

Q. Yes.

The TRIAL EXAMINER. That is already an exhibit. Why read it into the record again?

1260 Mr. SPRINGER. I want to refer to the language.

By Mr. SPRINGER:

Q. Does not paragraph B of that instruction on overhead construction costs forbid the addition to utility plant accounts such as you estimated for overhead?

A. First of all, my overheads are not estimated overheads; they are actual overheads, and not estimated. The only estimate that we had to make was the allocation between operation and new construction work.

Q. How did you determine the actual overhead costs?

A. We determined them from an analysis of the Company's books. Somebody had to supervise and plan the new construction work, and it was based on the Company records.

Q. Do you mean that the Company records are sufficiently specific to permit a segregation retroactively of overhead construction costs?

A. It was segregated by us on an equal dollar basis between operation and new construction work.

Q. Well, that is an estimate, is it not?

A. No; that is an allocation, and it is a very reasonable and fair allocation. As a matter of fact, I think the supervisory forces of the Company spent more time in connection with new construction work than they do with regular operation, which is just routine work.

1261 Q. What is the difference between an allocation and an estimate?

A. An allocation is when you know the total cost and you allocate it between certain things, while an estimate is where you actually have to estimate it.

Q. Could you make an allocation without making an estimate?

A. Yes.

Q. How?

A. If the Company spends $6,000,000 for operation and $4,000,000 for construction, the overheads would be 60 percent operation and 40 percent construction. That is just an example. It is very easy. It is all done on an equal dollar basis.

Q. Are you responsible for all of the statements made in connection with your study of overhead construction costs?

A. No, sir; I had discussions with the management of the Company and with the company lawyers.

Q. What instructions or advice did they give you?

A. I don't recall the specific instructions, but we decided that this was the only method by which we could determine the fair overheads applicable to the Hope Company properties.

* * *

1262 Q. Now, Mr. Antonelli, on page 13, on the subject of overhead costs, referring to group four, general overhead,

consisting of general administrative, legal, accounting and engineering service, and in detail on page 44, you state that some engineering expenditures were included by the Company in the investments, and that you did not use those expenditures in determining these overheads. Are those engineering expenditures still included in investments?

A. Yes, they are.

Q. In addition to your claim for engineering service overheads?

A. Well, there is no duplication between the engineering that has been charged to investment and engineering that has been expensed, but charged to operation. If it is charged to investment, it is still in investment and it has not been taken into consideration in determining the overheads.

Q. How could you determine there was no duplication?

A. Well, because the Company does not make a practice to charge the time of a supervisor in two places. They charge it to expense or charge it to investments. We have checked it and we know.

1263 Q. You have checked every entry?

A. Absolutely.

Q. Then this could not occur, you say, that if engineering and supervision were in the past capitalized and shown in the investment, that you have in your overhead cost statement added something for the same engineering and supervision?

A. No, sir.

Q. And you have checked every entry, to be sure?

A. Absolutely.

Q. In the past, the Company has made an allocation of the engineering expenses between capital and operating expenses, isn't that so?

A. In the past, the company has charged for certain jobs a portion of the time of certain of the men that supervised the construction of the new work: yes, sir.

Q. And that went into investment?

A. That went into investment: yes, sir.

Q. Now, you have come along in your original cost statement and taken the portion of engineering overhead that went to the expense and reallocated some portion of that on top of the investment, which includes the former engineering service?

A. That is not the same engineering. There is no duplication, as I said. Yes, we did, because engineering as was

1264 shown in the investment was not the complete engineering, and that these overheads include more than that engineering. In our engineering is included the administrative costs and the legal costs and the accountants' costs, and those costs are always charged to operating expenses.

Q. My question was confined to engineering supervision.

A. But our general overheads include more than engineering. It includes administrative, legal, accounting and engineering services.

Q. What examination did you make of the time distribution of the engineering department on the basis of which certain costs were allocated to investment by the company?

A. In that case the investigation was done during the examination of the vouchers, to determine the true cost of the operating units that we are trying to get the original cost for.

Mr. SPRINGER. May I have my question repeated?

(The question is repeated.)

The WITNESS. There was no time distribution. If any engineering charges were charged to investment, they were charged directly through vouchers. We did not have to find the time distribution. As a matter of fact there was no time distribution.

1265 By Mr. SPRINGER:

Q. What was the basis of your information for the allocation?

A. The allocation was based on a dollar basis between operating expenses and gross addition to investments.

Q. That was not the basis which the Company used when it originally accounted for engineering?

A. No. Any time that the Company charged engineering to investment, they would charge it directly.

Q. Were you able to determine what engineering services reflected the amounts directly chargeable to operating expenses?

A. No, sir.

Q. How would you be able to reallocate retroactively then the engineering services?

A. I did not allocate just the engineering services; I allocated the general overheads, and the general overheads includes the engineering services.

Q. On pages 43 and 44 of your exhibit, you mention the overheads. Was any portion of the administrative, legal or account-

ing department expenses identified as items 1, 2 and 3, ever allocated to investment by the Company?

A. As far as I know, those charges were never allocated to investment.

Q. On page 44, under the accounting department
1266 functions, you list the preparation of financial statements.

Do you think that the cost of preparing financial statements should be allocated to construction costs?

A. Well, that is only one function of the accounting department, and naturally if the Company lays a line, they will have to make a statement of the conditions. Surely. Why not?

Q. Your answer is "Yes"?

A. Yes, sir.

Q. Do you think that keeping the cash book, showing the receipts and disbursements of the Company funds, and the general ledgers and books, should be allocated to construction account?

A. These are all various functions that the accounting department does, and among those functions are the functions that pertain to the construction of new lines, to keep track of the books, preparing inventories, taking care of the payrolls, and so forth.

Q. Is your answer, Yes?

A. Yes, sir.

Q. Can you quote an accounting authority which would support your conclusion that keeping a cash book and preparing financial statements should be allocated to construction costs?

* * *

1267 The WITNESS. This represents all of the functions of the accounting department, and naturally, we allocate only a certain portion of it to the construction work, but proper estimates for the cash requirements might as well be a part of the new construction work.

By Mr. SPRINGER:

Q. Do you have an accounting authority which would support your statement that preparing financial statements, in part, should be allocated to construction costs?

A. All of this allocation was made after discussion with the management and the accountants of the Company.

Q. Do you mean Mr. Chisler?

A. Yes, sir.

Q. Do you state definitely that none of the costs of the functions listed under legal, administrative, engineering and
1268 accounting, on pages 43 and 44 were incurred in connection with gas purchased for resale?

A. Gas purchased for resale does not involve any considerable supervisory expense.

Mr. SPRINGER. Will you repeat my question, please?

(The question is repeated.)

The WITNESS. Not to the extent of the amount of the gas purchased for resale, no, sir.

Mr. SPRINGER. I do not believe that answers the question. Will you repeat it again?

(The question is repeated.)

The TRIAL EXAMINER. Now, read the answer.

(The answer is repeated.)

The TRIAL EXAMINER. It is not very clear to me.

Mr. COCKLEY. You mean No, don't you? Is not that the effect of it?

Mr. MILDE. Do you understand the question, Mr. Antonelli?

The WITNESS. Yes, I do. Maybe the incidental costs in connection with the purchase of gas has been included, but to include the amount paid for gas purchased would greatly distort the overhead percentage.

By Mr. SPRINGER:

Q. How do you know that?

A. It is self-evident.

1269 Q. Will you explain that to me?

A. Because the gas purchased for resale is a very large amount of money, and the Company would make a contract and that contract would be in effect year after year and certainly it would distort the picture if we added this gas purchased for resale year after year in order to determine the overheads. The overheads would be out of line.

The TRIAL EXAMINER. Your question was whether these overheads had been added to the gas purchased, was it not?

Mr. MILDE. In replying to the Examiner, let me ask if you did not add overheads to the gas purchased? Did you?

The WITNESS. No; we did not.

The TRIAL EXAMINER. That is the way I understood the original question. The question was whether or not any of these items had been included in gas purchased.

The WITNESS. The gas purchased was eliminated from the operating expenses when the overheads were determined.

By Mr. SPRINGER:

Q. Do you know how much of the costs of the functions of the administrative, legal, accounting and engineering departments are related to gas purchased for resale?

A. Not offhand; no, sir.

Q. You mentioned the contracts and the functions of the legal department relating to gas purchases for resale, and you
1270 exclude in your computations the gas purchased for resale?

A. Yes, I do.

Q. Are you able to state definitely that none of the costs of the functions listed under the administrative and accounting departments are incurred in connection with your second exclusion, gas used for compressor station operation, on page 44?

A. Yes, sir.

* * *

Q. Can you state that none of the costs of the functions you have listed under administrative and accounting departments, are incurred in connection with your third exclusion, depreciation and amortization items and taxes, other than payroll taxes?

A. Item Number 3 has been excluded because depreciation and amortization do not involve actual expenditures. Taxes do not involve supervision in proportion to the amount of the tax paid.

Q. Your answer would be "No." to my question, would it not?

A. That is right.

Q. Can you state that none of the costs of the administrative, accounting and engineering departments, are incurred in
1271 connection with your fifth exclusion, which is three-quarters of the cost of large purchases of property in place?

A. That is approximately right; yes, sir.

Q. You mean the answer is, No?

A. The answer is, No.

* * *

1325 Q. Now, will you please refer to page 13 of your Exhibit 20. Were the actual administrative and general expenses formerly charged to operating expenses by the Hope Company?

A. Yes, Sir; they were.

Q. Did the Hope Company ever maintain any records by which it could equitably allocate administrative and general expenses to specific construction projects?

A. No, sir.

Q. Have representations ever been made for the Hope Company in a rate proceeding where its administrative and general expenses reflected on the books had been reduced to exclude amounts now claimed to be allocable to construction costs?

A. May I have that question repeated?

1326 (The question is repeated)

The Witness. I personally don't know of any.

* * *

By Mr. Springer:

Q. In your exhibit on original cost, you have restated approximating a net of $17,000,000, which were formerly charged to operating expenses, from 1900 to 1939, isn't that so, Mr. Antonelli?

A. That is correct.

Q. Mr. Antonelli, referring to page 13 of your exhibit, how did you determine that interest during construction should be 6 per cent?

A. We had to have a reasonable interest rate which could be used over a long period of years, and after consideration, we decided to use the West Virginia legal rate for interest for all items in the original cost exceeding $5,000. in cost and requiring more than thirty days to construct.

Q. Whe nyou say "we decided" would you name the per-

1327 sons in the conference?

A. The decision was made by the management of the Company, Mr. Chisler and Mr. Tonkin, I believe—I am not quite sure if he was present—and the counsel for the Hope Company——

* * *

The Witness. A more appropriate interest during construction would have been the fair rate of return applicable to the properties throughout the history of the Company. However, it would have been very difficult to determine such a rate year after year, and that was one of the reasons that we finally

1328 adopted the 6 per cent legal rate, which we think is a reasonable rate.

By Mr. SPRINGER:

Q. Has the Hope Natural Gas Company ever paid 6 per cent on borowed nioney?

A. They have loaned money out at 6 per cent.

* * *

Q. Do you know whether the Hope Company has ever borrowed any money for construction purposes?

A. I don't know offhand, no, sir; but I made an investigation and I found out that the Company has loaned money at
1329 6 per cent.

Q. What has been the Company's experience in borrowing money? Has it ever paid 6 per cent for borrowed money for construction purposes?

Mr. COCKLEY. I still object to the question.

The TRIAL EXAMINER. The objection is overruled.

Mr. COCKLEY. Exception.

The WITNESS. I must repeat my answer that I don't know.

By Mr. SPRINGER:

Q. You don't know?

A. No, sir.

Q. You made no investigation of the cost of money to the Hope Company?

A. No, sir; I did not.

Q. Please refer to page 31 of your exhibit. Apparently overheads for compressor station equipment have been duplicated in that statement. Would you explain that?

A. What overheads?

Q. Engineering and superintendence, for example?

A. No, they have not been duplicated.

Q. Does not the book cost already include overheads for engineering and superintendence?

A. It includes a small amount of engineering and superintendence. They call it engineering and superintendence,
1330 but usually it means surveyors or engineers making locations and expenses for some of the general officers.

Q. And the engineering and superintendence in your overheads which has been added includes those same services, does it not?

A. It is no duplication at all.

Q. Why?

A. There is an additional general overhead which is administrative, accounting, engineering, and legal.

Q. How do you know that it is not a duplication?

A. I know because I investigated it. I had pages to show station by station, who did the station and how it was built and what was included and what was excluded. As a matter of fact I did not include all of the costs. I have a statement that will show even by names, the men that have been excluded. We have pro-rated all overheads on an equal dollar basis. It was taken as to each item of equipment and there was no duplication whatsoever in the overheads.

Q. Now, referring to page 31 again, you have a classification of property there, property purchased from non-utilities or other utlities, where not an operating unit or system. Who determined what purchased property was to go into this classification?

A. A list was prepared of all of the companies from
1331 which we purchased properties, and that list was turned over to the legal department of the Hope Natural Gas Company, and the legal department spent a considerable time in going over the annual reports filed with the West Virginia Public Service Commission, and also by writing to the various companies.

Q. And you relied on that determination for your classification?

A. Yes, sir.

* * *

Q. Do you know what the basis of the classification was, or did you just take the legal department's determination?

A. Most of it is self-evident. The companies are such, when they are serving the public, and when there were a few doubtful, and it was gone through very carefully, and we carried
1332 on correspondence for several months before we finally decided whether or not the Company was a utility.

Q. Will you state the amount of property purchased from non utilities or from other utilities, where not an operating unit or system, as reflected in your exhibit, and which represents what percentage of the total of such property, plus the property constructed by the Hope Company?

A. I have an approximate figure which shows the properties acquired from non-utility companies. It is only an approximate figure. It amounts to approximately $1,800,000 which is less than 7 per cent of the total original cost.

Q. It would be a greater precentage, would it not, of the total of the property plus property constructed by the Hope Company?

A. This $4,800,000, the 7 per cent represents the percentage of the total property—of the $70,000,000.

Q. Yes; but the percentage of $64,917,000 of property purchased from non-utilities, or from other utilities where not an operating unit or system, plus the property constructed by the Hope Company, would be greater, would it not?

A. Yes, sir.

Q. Do you have that percentage?

A. No, I have not. It would be about 7½ per cent.

* * * *

1334 Q. Do you know the amount of property that was purchased by the Hope Company from associated companies?

A. No, sir; but it is in my papers, in my working papers.

Q. Could you furnish that?

A. That would be a very big job, because we have our properties set up by units of property, and it would necessitate going over all of the working papers.

Q. Do you remember whether there was much property purchased from associated companies by the Hope Company?

A. They purchased properties from the Clarksburg Light & Heat Company, the Mountain State Company, the Flaggy Meadow Company, some perhaps from the Reserve Gas Company, the Hope Construction and Refining Company, the South Penn Oil Company—those are the major companies, I think.

Q. Those are associated companies, from which the Hope Company has purchased property?

A. Yes, sir.

Q. Do you know the dollar amount?

A. Not offhand; no, sir. How much the company paid for the properties, or the original cost?

1335 Q. Stated in original cost.

A. No; it is all intermingled in our work sheets, with other properties, and it will be a big job to get it.

Q. It might be $9,000,000 might it not?

A. The total purchased properties from utilities and nonutilities amounted to $9,000,000 but I know that the Company has purchased properties from other companies which are not affiliated or related to the Hope Company, so it could not be $9,000,000; it must be less.

Q. Do your working papers show the original cost to the former companies of the properties purchased by the Hope Company?

A. It shows the properties as they existed on December 31, 1938—the remaining properties as of December 31, 1938.

Q. Mr. Antonelli, is the amount of properties purchased by the Hope Company from associated companies readily ascertainable from your working papers?

A. I don't know what you mean by "readily ascertainable."

Q. Is it set out? Is it segregated or is it intermingled?

A. The development of the cost is segregated, but in a summary in the final work sheets it is intermingled, because, for instance, the Company might buy a well from the Reserve Gas Company and drill it deeper, and therefore, half of the well is Hope
1336 Company and drilled by the Hope Company, and the other half was purchased from the Reserve Gas Company, so in order to give you a statement of the amount, as you would like to have it, it would be necessary for me to go to the working papers.

Q. Did you not first make an analysis of purchases by the Hope Company?

A. Yes, sir; I did.

Q. Then you must have a list of purchases by companies and the amounts, and then the associated companies could be selected from that list?

A. But this is not an easy job. We have been working here now for a long time and we have 78,000 sheets, you know. We tried to do a job which could be substantiated, and it is not just sitting down and taking figures and going to this book and getting the cost of a prior company and then going to another book; it is not done that way. We had to investigate it and investigate the vouchers, and investigate the records, and we had to make certain adjustments, and we had to apply costs that were not shown on the books, so I could not just go there and give you a figure in five minutes or a half a day. It will take time. We have all the information—we have everything.

Q. That information is available?

A. Yes, sir; it is available.

1337 Q. But it would require a compilation of material?

A. The property purchased from affiliates and still in existence—information of that kind is available, yes, sir.

Q. You said that you made an analysis of the property purchased by the Hope Company?

A. Yes, I did; a very detailed analysis.

Q. And that would show the total property purchased by the Hope Company from associated companies, would it not?

A. As they existed on December 31, 1938.

Q. Can you furnish that information?

A. It will require a little time. Of course, I will have to ask my counsel.

Mr. MILDE. I don't understand what Mr. Springer wants.

Mr. SPRINGER. It is pretty obvious that when the Hope Company buys property from an associated company, it is important to investigate the price paid and the original cost to the company first dedicating it to the public service, in order to determine whether or not there is an inter-company profit.

* * *

1338 Q. In estimating the general and administrative expenses allocable to cost of this type of purchased property, did you distinguish between properties purchased from associated companies and from nonassociated companies?

A. Are you referring to properties purchased from utilities or from nonutilities?

Q. From nonutilities.

A. On properties purchased from nonutilities, the overheads that we added was equivalent to one-quarter of the general overheads which we applied to the property purchased from utilities, and that one-quarter of the general overhead was the same for the property purchased from affiliated companies or property—no: it could not be—yes: it is possible. Excuse me. From
1339 affiliated companies, or nonaffiliated companies, or nonutility.

Q. How did you determine that it should be one-quarter for overheads estimated to be allocable to property constructed by the Hope Company?

A. I discussed this matter with the management of the Company, and with counsel, and they all came to an agreement that the time of the Company's supervisory forces which was spent in negotiating and purchasing such properties, was about a quarter of the time that they spent in constructing new properties, and it was decided to use a quarter of the general overhead.

Q. Were any studies made upon which the one-quarter determination was based, or did you just get a statement?

A. In connection with another company, I had occasion to make a study of this type, and from our engineering experience with such properties, we think, and I think myself, that one-quarter is a fair figure—that one-quarter of the general overhead is a fair figure for properties purchased from nonutilities.

Q. What other company were you speaking about?

A. With a company that was purchased from—I don't know offhand; I will have to refer to the working papers.

Q. You will look that up?

A. Yes.

1340 Q. When you spoke of the management and counsel, could you name the persons who advised you to use the one-quarter estimate?

A. Mr. Chisler and Mr. Tonkin and counsel for the Company.

Q. Now, referring to property purchased by Hope from utilities, as an operating unit or system on page 32, totalling $3,218,399.28 in column 12, captioned, "Cost Capitalized per Hope books," what does that represent?

A. That represents what the Hope Company paid for these properties, exclusive of any additional charges that might have been incurred. That is the actual price that they paid.

Q. That is the cost to the Hope Company at the date of their acquisition?

A. For the properties still in existence at December 31, 1938.

Q. What disposition was made of the costs subsequently retired?

A. I could not answer that question.

Q. You know how much the Hope Company paid for the property but you don't know how much has been retired since it was acquired?

A. No; because I was not interested in how much property had been retired. I worked from the inventory as of

1341 December 31, 1938, the total properties existing as of that date.

Q. Do you know what the cost capitalized per the predecessor company books was in relation to the $3,000,000 figure of cost capitalized per the Hope Company books?

A. We might have some of those figures on our working papers, but I am sure that we do not have it for all of the companies.

Q. Do you know what the original cost of the property was when it was first devoted to public use by the predecessor company?

A. No, sir; I was not interested to know.

Mr. COCKLEY. Are you speaking now of nonutility companies?

Mr. SPRINGER. No; we are speaking of property purchased by

the Hope Company from other utilities, as an operating unit or system.

Mr. MILDE. What was your question?

By Mr. SPRINGER:

Q. Do you know what was the original cost of the property to the predecessor company first devoting it to the public use?

A. No, sir; although there might be some papers in my files which will give you some information, but I am certain that the information is not complete.

The TRIAL EXAMINER. You said that you were not interested in that question?

1342

The WITNESS. No; because I was interested in the properties existing December 31, 1938, and I did determine the original cost of properties which are still in existence but not the properties that were retired or withdrawn.

Mr. COCKLEY: I do not think the witness and the Examiner are talking about the same thing, but maybe I am the one that is confused.

By Mr. SPRINGER:

Q. Referring to page 32, Mr. Antonelli, under the caption "Property purchased by Hope from other utilities as an operating unit or system," you show in column 12 the figure of $3,218,399 cost capitalized per the Hope Company books?

A. That is right.

Q. Did you determine the original cost of that property to the predecessor company first devoting it to public use?

A. Certainly; yes, sir.

Q. You did?

A. Yes, sir.

Q. And where is the difference between the original cost and the amount that Hope paid for that property?

A. That would be shown in the details of our working papers.

Q. Under the new Uniform System of Accounts for West

1343

Virginia gas utilities, that would appear in the acquisition adjustment account, would it not?

A. This is not an accounting job. I was just determining the original cost of these properties.

Q. Of course, you constantly refer to the West Virginia Public Service Commission Uniform System of Accounts in your exhibit. You say you have adopted the accounting principles?

A. Yes, sir.

Q. And you have used their classifications of property. Did you just take what you desired from the system and ignore the rest?

A. No. This original cost has been set up on the same basis as if this uniform system of accounts had been in effect throughout the history of the Company.

Q. Does your exhibit contain the amount which you say you determined to be the original cost of the property to the predecessor company first devoting it to public use?

A. Yes, sir; if you will refer to the property purchased by the Hope Company from other utilities and operating systems or units; yes, sir.

Q. Well, is that in your exhibit?

A. That is in various items of equipment purchased. You will find it in the well accounts, building of pipe lines, and it is all set up, and we will estimate what the company
1344 paid and what was original cost.

Q. Don't you have a tabulation that will show in one column the original cost of the property to the company first devoting it to public use, and in the next column the amount of money paid by the Hope Company for that property, and another column showing the difference?

A. No, sir. We had a job to prepare this original cost, and we had a big job and we could not stop and make different kinds of exhibits, exhibits that I did not think were necessary at the time.

* * *

1346 The WITNESS. Column 12 gives you the cost capitalized on the Hope Company's books, and that shows what the Company actually paid for these properties.

The TRIAL EXAMINER. But it does not show what the company originally devoting it to public use paid for it, does it?

The WITNESS. Column 11 will give you that for——

Mr. MILDE. (Interrupting). Column 17.

The WITNESS. Column 17 will give you that.

The TRIAL EXAMINER. Column 17 represents the total of columns 12, 13, 14, 15, and 16.

The WITNESS. That is the original cost to the prior companies.

* * *

1348 Q. On page 32, Mr. Antonelli, with respect to direct material and labor costs, to other utilities, which were purchased as operating units in the amount of $4,639,000 how did you secure that information?

A. The information came from records pertaining to the prior companies, and in some cases where the records were not available, direct material and labor costs were estimated.

Q. Do you know how much of the amount was charged to operating expenses on the books of the predecessor company?

1349 A. In most of the cases, the companies were affiliated or associated with the Hope Company and were under the same management, and the books were kept about the same as the Hope Company's, and I had an idea—I knew that the affiliated companies kept their books as the Hope Company did.

Q. How much of the amount did you have to estimate?

A. I could not tell you offhand.

Q. Pardon me?

A. I could not tell you offhand. I don't know.

Q. Was it a large amount?

A. I don't think so; no.

Q. I believe you have stated that the direct material and labor costs were charged to operating expenses by the predecessor companies?

A. Direct material and labor costs? No; I did not.

Q. Didn't you say the practices were the same as the Hope system?

A. Yes sir. The books were kept exactly as the Hope keeps their own books.

Q. How did you determine the actual material and labor cost for other utilities?

A. By analyzing the vouchers, as in the case of the Clarksburg Heating and Light Company. In the case of the Mountain

1350 State, I think we had quite many records. We had some records in connection with the Flaggy Meadow Company.

Q. On page 16, you state that where the original costs could not be ascertained from the predecessor company's books, that Hope Company's experience was used as the basis. Did you make an appraisal for that purpose?

A. An appraisal? No, we did not make any appraisals at all. We determined the original cost.

Q. If you had to use the Hope Company's experience you had to determine comparability, didn't you?

A. Certainly. For instance, the Clarksburg Light & Heat Company has a well in the Bridgeport District and the Hope Company has a well in the Bridgeport District, and if we have

the cost of drilling a well, say in 1916, for that district, certainly that would be a fair price to use for pricing the Clarksburg Light & Heat Company's well. It is not an estimate or making a unit cost, but it is basing it on the best available information that we could get.

Q. On page 34, under column 14, unloading, hauling and warehouse handling cost on property purchased by the Hope Company as operating units, totalling $18,556, were they formerly charged to operating expenses?

A. I don't know. These overheads were based on the Hope Company's experience. It does not amount to very much in dollars.

1351 Q. You did not make an examination of the predecessor company's books to determine that cost?

A. No; it would have involved a great deal of work and it was not worth it. I don't believe we would have been able to get all of the costs.

Q. You don't know whether they were expensed or capitalized?

A. No, sir.

Q. On page 32, referring to——

A. (Interrupting.) I would like to correct that statement. I know they were not capitalized and they were not included under direct material and labor costs. I know that much.

Q. Under indirect field costs, column 15 of page 32 of property purchased by the Hope Company from other utilities, as operating units totalling $38,919 were those costs determined from the records of predecessor companies?

A. No, sir; they were based on the Hope Company's experience.

Q. That was the basis of the memory of the men who were field superintendents?

A. Yes, sir.

Q. Were actual indirect field costs of property purchased by the Hope Company as operating units, charged to operating expenses by the predecessor companies?

A. I don't understand your question.

1352 Mr. SPRINGER. I will ask the reporter to repeat the question.

(The question is repeated.)

The WITNESS. It all depends on the kind of properties involved. In some cases, some kinds of properties, the predecessor, judging from the method that the Hope Company kept their books, the

indirect field costs were charged direct to investment. In other cases, such as gas well equipment and field lines, my judgment on what I saw on the Company's books was that they were charged to operating expenses.

Q. Were any of those indirect field costs capitalized by the predecessor company?

A. As I said, for certain of the accounts, yes, sir.

Q. Do you know how much?

A. No, sir; that was reflected in the costs which we obtained from the predecessor company, but I don't know how much.

Q. Now, referring to the overhead costs, column 16, page 32, totalling $122,042, how do you know that the overhead percentages for the Hope Company constructed properties apply to the purchased properties?

A. That was based on my experience in the last twenty years. The Hope Company overheads were very reasonable, and
1353 I considered that it would be applicable to properties that were purchased from other utilities, as part of a unit or system.

Q. Were the actual overhead costs for property purchased by Hope as operating units, charged to operating expenses by the predecessor companies?

A. Yes, sir; as far as I can determine from the company's predecessor books.

Q. Throughout your examination, you have stated that you consulted Mr. Chisler or received instructions from him in the preparation of your exhibit.

* * *

The WITNESS. Yes; I consulted Mr. Chisler and consulted some of the other men of the Hope Company management, and I consulted the counsel of the Company.

* * *

5068 Cross-examination by Mr. SLAFF:

Q. Did you follow a Code of Accounts in the preparation of your original cost determination in this case?

A. Yes, sir; I did, as much as possible.

Q. What Code of Accounts?

A. I followed the West Virginia new Code of Accounts as prescribed in 1939.

Q. And the Federal Power Commission System of Accounts?

A. That is practically the same, those two.

Q. Now under those Codes of Accounts or Systems of Accounts similar to those two, what original cost determinations have you made other than the Hope determination?

A. Peoples Natural Gas Company.

Q. And those are the only two that you have made under
5069 those types of systems of accounts?

A. That is right.

Q. And you say with respect to the Peoples determination, Mr. Radcliffe, the Treasurer of the Company, was in charge of that, in general charge?

A. Yes; he was the man that decided on certain policies that we had to follow.

Q. Tell me this, Mr. Antonelli: Do you consider a coat of paint a property?

A. A coat of paint?

Q. Yes.

A. Why, certainly, if the house was painted when the building was first built, sure, why not?

Q. I am not asking you, Mr. Antonelli, to ask me why not. You do, then, consider a coat of paint a property of the Hope Natural Gas Company?

A. Yes, because I wanted to determine the complete original costs of the property. We went out in the field and found this building ——

* * *

5070 Q. (Interposing.) What building? Have I inquired about any building, Mr. Antonelli?

A. You said coat of paint as part of some other item.

Q. I am asking you whether you consider a coat of paint, just that, a property of the Hope Natural Gas Company. Now will you tell me whether you do or do not consider that a property?

A. I couldn't answer that question.

Q. You can't?

A. No, sir.

Q. Why didn't you say so in the first place?

A. All right.

Q. You cannot answer, then?

Mr. MILDE. He has already answered.

Mr. SLAFF. Now he has changed his answer.

By Mr. SLAFF:

Q. You cannot answer as to whether or not you consider a coat of paint a property of the Hope Natural Gas Company, is
5071 that correct?

A. If it is part of some other item, yes; it is a property, and I tried to explain why.

* * *

5072 By Mr. SLAFF:

Q. Now, Mr. Antonelli, let's see if we can start over again in the light of the instructions—and the only binding ones are those of the Examiner.

In the light of those, can you now tell me whether you consider a coat of paint a property of the Hope Natural Gas Company?

A. I could not answer this question without qualification.

Q. And do you consider freight costs a property of the Hope Natural Gas Company?

A. Absolutely; yes.

Q. Now with respect to our coat of paint, or your coat of paint, you said you couldn't answer whether you considered that a property of the Hope Natural Gas Company without a
5073 qualification, is that right?

A. Yes, sir.

Q. Do you want to answer that with a qualification now?

A. Yes, sir; I do.

Q. Will you go ahead and do that?

A. All right. When we made the inventories of the Hope properties, we found that certain buildings were painted. Then by going to the Company records we found the cost of the buildings and found the material and the labor, but the voucher disclosed that the cost of painting was not included in this particular voucher for the particular building that I have reference to. Therefore, we added to the cost of the building the cost of the paint, and in that case we considered the painting as a cost of the property just as much as the lumber or anything else that went into that particular building.

Q. No, I didn't ask you whether you considered the cost of the painting as a cost of the property, that was not the question, Mr. Antonelli. The question was whether you considered the coat of paint a property of the Hope Natural Gas Company?

A. Yes, sir, with the qualification that I made.

Q. You do?

A. Yes.

Q. Now will you turn to page 72, say, of your exhibit
5074 that has been marked No. 60.

Now with respect to the office and warehouse, No. 9001, is it a fact that no costs were included in the Federal Power Commission original cost exhibit for that warehouse and office?

A. No, sir; that is not the fact.

Q. For that warehouse and office, costs were included in the Federal Power Commission original cost exhibit, is that not so?

A. Well, certain costs were included, but not all of the costs were included.

Q. Well, it is not an accurate statement to say, is it, that no costs were included in the Federal Power Commission original cost exhibit for office and warehouse, No. 9001?

A. No, but that is qualified by saying——

Q. (Interposing). Just a minute——

Mr. MILDE. (Interposing.) Let him finish his answer.

Mr. SLAFF. We will get his qualifications. Let's take it step by step.

By Mr. SLAFF:

Q. That statement, as I gave it to you, is not an accurate statement, then: that is to say—let me repeat it again.

TRIAL EXAMINER. I assume that you are making the statement, you are not referring to a statement that he has made elsewhere?

5075 Mr. SLAFF. I will come back to the statement that he has made.

By Mr. SLAFF:

Q. It is not an accurate statement to say that no costs are included in the Federal Power Commission original cost exhibit for the Hope Natural Gas Company, Office and Warehouse No. 9001, in the Bridgeport District, is it?

A. Well, as far as you have gone you are correct. Of course, in my testimony yesterday, I said that part of the costs were not included. That was, I believe, the answer to the first question asked.

Q. Now also with respect to the Drilling Tool Shed, No. 9003, the original cost exhibit of the Federal Power Commission does include costs for that Drilling Tool Shed, does it not?

A. Well, it includes incomplete costs.

Q. Well, it does include costs for that Tool Shed, does it not?

A. Yes, it does.

Q. All right——

A. (Interposing.) Certain costs.

Q. Again with respect to that Drilling Tool Shed, No 9003, in the Bridgeport District, it is inaccurate to say that there are no costs included for that Drilling Tool Shed in the Federal Power Commission original cost exhibit?

A. I didn't say that.

5076 Q. Isn't that correct?

A. No, sir.

Mr. MILDE. I object to that question, because nobody has made that statement except Mr. Slaff.

Mr. SLAFF. No one except the exhibit on its face, that is all.

Mr. MILDE. The statement is not made in the exhibit, and we are not cross-examining Mr. Antonelli about the correctness or incorrectness of statements made by Mr. Slaff. It is perfectly apparent that when it says Office and Warehouse, No. 9001, and lists items of property that are excluded, that you can't take part of the description and say—is that an accurate or inaccurate statement?

TRIAL EXAMINER. It also says there, "All material and construction costs"; what does that mean?

Mr. MILDE. For this concrete block wall, et cetera, as contained in Office and Warehouse No. 9001.

Mr. SLAFF. It is thoroughly patent to me, Mr. Examiner, that this is a completely misleading exhibit beginning with column 1, and I think I have a right to develop that.

TRIAL EXAMINER. Well, the way I would read this, the way I would interpret it would be that it included all of the Office and Warehouse No. 9001, and these items set out under that are simply specifications of what might have gone into it. I cer-

5077 tainly would not conclude that it only meant a portion of that office and warehouse.

Mr. MILDE. Well, I think if Mr. Antonelli hasn't made that clear already, he should, because it is those parts of these buildings for which all construction and material costs are excluded.

Mr. SLAFF. It seems perfectly patent that it hasn't been made too clear up to now. If the Examiner understands it as he stated, and as I understood it until I started to get into the

underlying work papers and found that the original cost exhibit of the Federal Power Commission did include costs for many of the items set out in column 1.

TRIAL EXAMINER. As I understand it now, then, the first line in each of these items represents the structure concerned, and then below that you set out in more detail the items which were not included, is that it?

Mr. MILDE. That is right. Take that first item. Now Office and Warehouse No. 9001, the following parts of that building, as it were, were not included in the Commission examiners costs, but were included by Mr. Antonelli, the concrete block wall, plasterboard, millwork, plumbing fixtures and electric lights, and the exclusion there is all material and construction costs for those parts of the building. Now if you will run down to, say, the Dresser Coupling Shed, No. 9056, which is the second item under the Buffalo District, there the amount excluded is the
5078 building itself, you see "One story, wood frame structure, with rolled roofing and wood sheathing sides". That means that in that case the entire building was excluded. Frankly, it was difficult to set these matters up, but we did it in a way that we thought would give as nearly a complete story as we could, and you really have to read each one of these subsidiary items to know what part of the cost of a building, whether it was all or part, has been included by Mr. Antonelli and excluded by the Commission examiners.

Take the bottom line of this page, Screw Coupling Shed, No. 9058, and there the description is a description of the entire building, "One story, wood frame structure", and so on, whereas, if you go up to the Oil House, No. 9002, the second item, the omitted parts there are the millwork, electric lights, and so on.

Is that a correct statement, Mr. Antonelli, of the way this item is set up?

The WITNESS. That is entirely correct, that is exactly what we did.

TRIAL EXAMINER. It seems to me that under this arrangement here, you would have set up, under this first item, the entire original cost of this structure as shown in Exhibit No. 20. That would appear in column No. 1, or No. 2, rather, and then over here you would have shown the amount included by the F. P. C. original cost exhibit and the amount excluded, and
5079 explain the amounts which were excluded.

Mr. MILDE. Well, that would have meant practically a reproduction of these 70,000 work sheets that we have.

TRIAL EXAMINER. Well, it doesn't seem to me that it would. Of course, I don't know as we are accomplishing anything by arguing about it, but if you put this concrete block wall, and so forth, over in the last column, that would have made it clearer.

Mr. MILDE. That might have been a better way to set it up. You don't always think of the best ideas first. I want the Examiner, however, to be perfectly clear what this exhibit shows on those structural items; those parts or all of the structures that have been omitted are described under the name of the structure. I think the only exception to that, that I should direct your attention to, is in the case of the lease and land accounts——

Mr. SLAFF. (Interposing.) We will come to that. I would like to proceed.

TRIAL EXAMINER. Proceed.

By Mr. SLAFF:

Q. Do you agree, Mr. Antonelli, with Mr. Milde's testimony?

A. Yes, sir; I do.

Q. Now with respect to the items on page 72, then, as he explained it, taking the Tool Shed listed in the Buffalo
5080 District, one story, wood frame structure, et cetera, that indicates that no costs were allowed for in the Federal Power Commission exhibit, is that right?

A. No; there is another item, 9056 seems to be a complete building.

Q. I am just taking them one by one.

A. Oh.

Q. Now with respect to No. 9055, because there is that description, we are to understand that no costs were allowed in the Federal Power Commission exhibit of that building, is that right?

A. That is right.

Q. The same is true with respect to 9056, is that correct?

A. Yes.

Q. 9057 also?

A. Yes, sir.

Q. Go over to 9060 on page 73. That is described as a one story, wood frame structure with rolled roofing, et cetera. Were any costs included in the Federal Power Commission original cost exhibit for that item?

A. No, sir.

Q. None whatever?

A. No, sir.

Q. Where is that listed in your working papers?

5081 A. It is listed on page 12, book 137.

Q. Is it not a fact that $325.51 of the cost of that storage shed was included in the Federal Power Commission original cost exhibit?

A. I can't say offhand unless I refer to my papers.

Q. You just said offhand a minute ago that no cost was included, didn't you?

A. Yes, sir; I did, according to this.

Q. Now what do you say on reconsideration?

A. I don't know what is in the papers.

Q. Go to your working papers.

A. I haven't got those working papers with me. I will produce the working papers and check it up.

Q. Will you check that up?

A. Yes, sir.

Q. Tell us if that is not a fact with respect to storage shed No. 9060.

A. 9060 or 9059?

Q. 9060.

A. I don't think there is anything included in the Federal Power Commission exhibit for this particular shed; but I would like to check it.

Q. By all means.

A. I will.

Q. Now let's go to the leases.

5082 From pages 4 to 30 in your Account No. 330-2, Natural Gas Producing Leaseholds, Operated, how many leases do you show on those 26 or 27 pages?

A. I haven't counted them.

Q. Well, I total about 2,650; does that sound about right to you?

A. Well, I will check it up. Yes, that is about right.

Q. Now you show, do you not, obtaining costs for each one of those leases?

A. No, sir.

Q. As excluded in the Federal Power Commission original cost exhibit?

A. No, sir; I don't.

Q. Well, what do the words "Obtaining cost" mean in line 1 of page 4, column 7?

A. As I testified yesterday, I said either obtaining or recording or abstracting, and an occasional consideration.

Q. With respect to Lease No. 578, did you include, as shown on page 4, obtaining costs?

A. No, sir; in that case I included $17.20 for abstracting cost. That is all that is included in that particular lease.

Q. What about lease 1897?

A. 1897?

Q. Yes.

5083 A. I don't have that lease, but I can look it up.

Q. What about 3977?

A. On 3977, I have costs of obtaining of $8; and I have costs of abstracting of $17.20; and costs of recording—$1.35.

Q. And for that lease 3977, you have no consideration?

A. Well, the consideration was capitalized, it wasn't necessary to include the consideration here.

Q. Then the consideration was not excluded in the Federal Power Commission original cost exhibit with respect to lease 3977, was it?

A. No; I never said it was.

Q. Well, your exhibit shows it as excluded in the Federal Power Commission original cost exhibit, does it not?

A. Well, this is only a brief description——

Q. (Interposing.) You mean a brief misleading description?

A. No; it would have been a tremendous typing job to list every cost separate, Mr. Slaff.

Q. Well, it is a tremendous job, Mr. Antonelli, I want you to understand, for me to have to go through this with you and make it understandable and correct.

A. I went over it with Mr. Pace. He came down to Clarksburg and we spent two days with him, and he examined the books, and it was perfectly clear to him that these were only part costs.

5084 Q. Mr. Antonelli, did you tell us in your direct testimony that the consideration cost of Lease No. 3977 had been included in the Federal Power Commission original cost exhibit?

A. Yes, sir; a general statement was made to that effect.

Q. With respect to Lease No. 3977, which, as far as your Exhibit 60, page 4, indicates, the consideration therefor was excluded in the Federal Power Commission cost exhibit.

Now, with respect to that specific lease, did you tell us, anyplace in your direct-examination, that the consideration cost for

that lease was included in the Federal Power Commission original cost exhibit?

A. Well, nobody asked me. No; I didn't.

Q. Well, were you holding out because nobody asked you?

A. Oh, no.

Q. Well, did you go over your testimony in advance with your counsel?

A. Yes.

Q. You knew what he was going to ask you?

A. Sure.

Q. And you knew in advance, before you got on the stand, didn't you, that you were not going to tell us with respect to any of these specific leases here, which your exhibit shows costs to have been excluded in the Federal Power Commission original cost exhibit, that those costs were not excluded?

5085 A. Well, as a matter of fact, I did, now when I come to think of it. I gave you the total amount for this cost to be $49,000, of which only $15 was consideration. Therefore, anyone, I assume, would understand that it cost more than $15 to purchase or to acquire these leases. I did say that; I did say that yesterday.

Q. And it is on the basis of that answer that you—in your mind, at least—justify stating that consideration costs for various of these leases are shown to be excluded in the Federal Power Commission exhibit, is that right?

A. Not only on that statement. I explained this exhibit to Mr. Pace, and I also made a statement yesterday which showed that the omitted costs were only part costs or the direct material and labor costs that were not capitalized on the Company's records.

Q. Now you show recording costs as excluded in the Federal Power Commission exhibit for each and every one of these 2600 or more leases, do you not, in your Exhibit No. 60?

A. No, sir; I don't.

Q. Well, do you show in line 1 of page 4 that recording costs for the three leases there shown were excluded in the Federal Power Commission original cost exhibit?

A. Not in this exhibit, it is shown on page 21.

Q. Turning to page 4——

A. (Interposing.) Yes, I have page 4.

5086 Q. Does that show that the recording costs for the three leases in the first line were excluded in the Federal Power Commission cost exhibit?

A. No, sir; it doesn't.
Q. It does not?
A. Not on this page; no, sir.
Q. Well, now, are you looking at column 7?
A. I am looking at column 7.
Q. What is the heading?
A. It says, "Obtaining, recording"——
Q. (Interposing.) No, the very top heading.
A. "Excluded in F. P. C. Original Cost Exhibit."
Q. That it right.
Now that means, I take it, excluded in Federal Power Commission original cost exhibit, is that right?
A. That is right.
Q. And underneath that heading are set out the items which were excluded in the Federal Power Commission original cost exhibit, is that not correct?
A. Yes, sir; that is correct.
Q. All right. Now with respect to the three leases in the first line on page 4, according to column 7 of your Exhibit 60, page 4, recording costs for those three leases were excluded in the Federal Power Commission original cost exhibit, isn't that so?
A. That is correct, but——
5087 Q. (Interposing.) Just a minute, we will get to your explanation.
Mr. MILDE. Let him finish now.
Mr. SLAFF. I have no objection to his making an explanation. But I would like to have him make it in an orderly fashion at the right time.
Mr. MILDE. This is the point that he has selected to make that explanation.
TRIAL EXAMINER. You want to strike out your original statement, "That is correct"?
The WITNESS. No, I would like to qualify my statement, Mr. Examiner.
TRIAL EXAMINER. You don't mean, then, that it is correct; you mean it is correct with qualification?
The WITNESS. That is right.
I would like to say that yesterday I explained that the costs excluded by the Federal Power Commission were either obtaining or recording or abstracting and an occasional consideration.
I was very particular about that, and the only reason that we did it this way was to save time and save a typing job. Other-

wise, we would have had about 10,000 pages here in this report. That is the only reason we did it the way we did.

By Mr. SLAFF:

5088 Q. Are you all through with your qualification?

A. Yes, sir.

Q. Do you want to make any more? Feel free to if you want to.

A. No; that is all.

Q. Now we have got your answer complete, then?

A. Yes, sir; you have.

Q. Now then, to get back to the original question.

As far as the face of this exhibit is concerned, page 4 of Exhibit 60, your represented in the exhibit that with respect to the three leases shown in the first line, the recording costs were excluded in the Federal Power Commission cost exhibit, isn't that correct, Mr. Antonelli? Isn't that a fair statement?

A. Well, not the way I look at it.

Q. Looking at the face of the exhibit? Look at that for a while, will you, and tell me if that isn't a fair statement that I have made to you?

A. I assume that someone not familiar with these pages might take it that way.

Q. Well, isn't it a fair statement, Mr. Antonelli, that anyone looking at this exhibit, looking at the exhibit itself, would find that you were representing in the exhibit that recording costs for the three leases set out in the first line of that page had been

5089 excluded in the Federal Power Commission original cost exhibit; isn't that a fair statement of what any reasonable person, looking at that exhibit, would understand, Mr. Antonelli?

A. Yes, sir.

Q. And the same is true, Mr. Antonelli, is it not, with respect to all the other leases set out on that page, that is to say, that any reasonable person looking at your exhibit would understand that you were representing that the recording costs for each and every one of the 2,600 leases contained in those pages 4 to 30, had been excluded in the Federal Power Commission original cost exhibit; isn't that so?

Mr. MILDE. Well, now; I object to that, because that isn't pertinent to this case. It isn't a matter of whether any reasonable person——

Mr. SLAFF (interposing.) It is pertinent to the fact that this is the most misleading exhibit, or one of the most misleading, that has been put in by the Company.

Mr. MILDE. May I finish?

TRIAL EXAMINER. Yes, proceed.

Mr. MILDE. This exhibit is part of a great mass of testimony on the matter of costs of leases and other things. It fits into the Company's exhibits and the Commission examiners' exhibits, and it is perfectly apparent, when those are all compared, precisely what is shown here.

Mr. Antonelli read the dollar amounts yesterday. We
5090 are not concerned here whether somebody to whom we handed this exhibit, on the street, even if he was a reasonable man would have any idea what it was about, he probably wouldn't. But fitting into the picture with all these other exhibits that are in here, which show that the Commission examiners have allowed so much for operated leases, and Mr. Antonelli claims so much, and there is a difference, his explanation as to what the dollar amounts are included in these things yesterday, it is all perfectly clear in the record and there was not the slightest attempt on the part of the Company to misrepresent the situation.

Now unfortunately, on some of these exhibits you don't always get them into the precise technical shape you would like, and I am sure Mr. Slaff wasn't misled, and we got this exhibit up in a hurry for cross-examination, and if we were doing it again we probably wouldn't do all this ditto marking, and that is why I had Mr. Antonelli explain yesterday that in the case of these leases, with respect to various leases, sometimes it was the recording cost and occasionally the consideration cost, and the abstracting cost and occasionally the obtaining cost, and he read the dollar amount of each of those in the record, and that was for the purpose of trying to make clear that we didn't intend by this exhibit to represent—and the Commission's staff knows that—we didn't intend to represent, in the case of each and every one of
5091 these leases, that all of these costs were excluded.

I think Mr. Slaff is right in saying that if you just presented it to somebody who just read the English language, without knowing anything about this case, he might get a wrong impression, and I had hoped yesterday that Mr. Antonelli had cleared that up.

In the case of leases and land accounts, some costs, of course, have been included by the Federal Power Commission exhibit, that is shown by this exhibit, it is shown by the comparison exhibits that are in this case; it is shown by our exhibits.

And this inventory of omitted items is intended to show the character of the excluded costs, and I don't want the Examiner

to think that we intended to make anything but a perfectly frank statement as to what this was, and I hoped that it had been clarified yesterday when I had Mr. Antonelli tell what the dollar amounts were.

My objection is based on the ground that to ask Mr. Antonelli whether a reasonable man would look at this and draw certain conclusions, just isn't pertinent to this case.

If he wants to ask whether he thinks somebody who knows all about these other exhibits would be misled, that might be pertinent.

Mr. SLAFF. As matter of fact, Mr. Examiner, this exhibit is thoroughly misleading, and it wasn't until last night,
5092 when I started trying to reconcile parts of his testimony with this exhibit, that I become aware first of the fact that apparently all these costs set out as excluded were not as had been represented in the exhibit. Up until that time—and I made, I think, a reasonably careful check of the exhibit—I had taken it for granted that they were as represented here.

Mr. MILDE. Well, I think, that is perfectly understandable, because Mr. Slaff hasn't been in this case from the beginning, and he doesn't know what these other exhibits are. I think if he were coming into it fresh, he might well have the viewpoint of the man on the street, and not——

Mr. SLAFF. (Interposing.) Let's get the viewpoint of the man who purports to be a little familiar with the case.

TRIAL EXAMINER. Objection overruled.

Mr. SLAFF. Can we have the question, Mr. Reporter?

(The question was read by the reporter as follows: "Q. And the same is true, Mr. Antonelli, is it not, with respect to all the other leases set out on that page, that is to say, that any reasonable person looking at your exhibit would understand that you were representing that the recording costs for each and every one of the 2,600 leases contained in those pages 4 to 30, had been excluded in the Federal Power Commission original cost exhibit; isn't that so?")

The WITNESS. It is a little misleading. I will admit that.

5093 By Mr. SLAFF:

Q. And the same is true also with respect to Account 330–2, "Natural Gas Producing Leaseholds—Unoperated," as set out at pages 32 to 62?

A. Yes, sir; that is correct.

Q. Now with respect to these 2,600 leases, or thereabouts, set out at pages 4 to 30, for which you show obtaining costs for all of them, there were obtaining costs attached to only about how many, do you know?

A. The obtaining costs were attached only to the leases that were purchased from landowners, I can't say how many.

Q. About 300, wouldn't it be, instead of the 2,600 for which you show obtaining costs?

A. Well, I will tell you how many.

Q. How much did you use for the average obtaining cost?

A. $8.

Q. $2,400 was your total for obtaining costs?

A. That is about correct; yes.

Q. Now what was the average recording cost, approximately, do you know?

A. The average recording cost I would say amounted to maybe $1.50 or maybe $2, I can't tell—probably there were 400 recordings.

Q. Instead of the 2,600 for which recording costs are shown as excluded by the Federal Power Commission exhibit,
5094 original cost exhibit, there are only 400, approximately?

A. That is right.

TRIAL EXAMINER. What was the total amount of that cost?

MR. SLAFF. $704.

The WITNESS. That is for operated leases.

By Mr. SLAFF:

Q. And, of course, with respect to all those numberless leases for which you shown consideration costs, probably only a very, very few of those actually had any consideration costs which were excluded in the Federal Power Commission original cost exhibit; that is also correct, is it not?

A. I think there was only one lease, I am not quite sure.

Q. Well, if there was only one lease, Mr. Antonelli, or only two leases, that had any consideration cost excluded by the Federal Power Commission exhibit, why did you show consideration costs excluded by them for every one?

A. Well, this was only a general heading, Mr. Slaff, and I probably should have made it a little clearer. I agree now with you that it is not as clear as it should have been.

Q. Let's go a little further into that. You show a consideration cost for all the leases set out on pages 4 to 11 of your exhibit, don't you?

A. 4 to 11?

Q. Yes.

5095. A. Yes, sir.

Q. Then at pages 11 to 20, you drop consideration costs as having been excluded in the Federal Power Commission original cost exhibit, isn't that so?

A. No; that must have been a mistake in typing, that is the first time I noticed that it was dropped; or maybe there wasn't any consideration for those particular leases. I will have to check that.

Q. Well, we know there wasn't any consideration for those?

A. Yes.

Q. And we know that there wasn't any consideration for all but two of the rest of the 2600, isn't that so?

A. I will have to check that statement. Maybe a consideration did appear to the extent of maybe a dollar per lease.

Q. If it was a dollar per lease, there couldn't have been any more than 15, could there?

A. I will have to check that.

Q. Let's have an answer right now. The total consideration cost of these leases was $15, wasn't it?

A. That is right.

Q. Now considering a dollar lease, that means that the consideration cost, excluded as you claim by the Federal Power
5096 Commission exhibit, applied to only 15 of the leases at a maximum, isn't that so?

A. No; it may be 50 cents.

Q. Well, we will get to the 50-cent basis. At a dollar a lease consideration——

A. (Interposing.) That will affect 15 pages.

Q. 15 pages or 15 leases?

A. 15 pages, because maybe each lease might be on a separate page.

Q. Now, let's start all over again, Mr. Antonelli, so you understand my question.

Let's begin from the beginning. You told us there were $15 of consideration costs excluded by the Federal Power Commission's original cost exhibit, is that right?

A. Yes, sir.

Q. Now you don't want to change that statement, do you?

A. No, sir; I don't.

Q. Now you told us a little earlier this morning that maybe that applied to a couple of leases, one or two leases, and you apparently do want to change that statement now, is that correct?

A. Yes; I am not quite sure now when I see all the consideration appearing on certain pages and not on other pages. I would like to change my answer.

Q. Do you know of a consideration for a lease of 50 cents in the Appalachian field?

5097 A. No; well, I can't say offhand.

Q. Do you know of any?

A. Yes, I think so. They get some for nothing.

Q. But did you ever hear of a consideration of a half a dollar being offered?

A. Oh, yes; sure. I think you will find some in our working papers.

Q. And a quarter.

A. Yes, and 5 cents.

Q. You did?

A. Yes.

Q. Do you have any distinct recollection, or are you just plucking things out of thin air?

A. No; I am talking from records. I am pretty certain that I found some 5-cent considerations.

Q. Now of course you testified that they got some leases for nothing?

A. There are some leases included in here that the Company paid just obtaining and abstracting and recording costs on.

Q. Now, getting back to your consideration of $15, you have no idea whatever of how many leases that applies to?

A. Not offhand; no, sir.

Q. Do you have any judgment?

A. No; there are too many leases, I can't guess it.

5098 Q. You mean that on that one thing you won't guess, is that right?

A. Not until I look at my papers, and then I will tell you the right answer.

Q. Now can you tell us why, after setting out, on pages 4 through 11, consideration costs as excluded in the Federal Power Commission original cost exhibit for all the leases up to the last five lines of page 11, you, from that point on, through the 15th line on page 20, did not show consideration costs as excluded? What occasioned the change?

A. Well, I can't answer that question offhand. I will look it up at noontime and look up the working papers, and I will be glad to answer the question, because anything I say now will be a guess.

It was done in a hurry, it might be that it was just a mistake, but I don't think it was a mistake. The other reason might be that the boys were certain that there was no consideration for those leases listed in this particular book, which is Book 22, and so they left that out. I am very certain that it was done on purpose, because, as you will notice, that is in Book 22.

Q. Yes; and it occurs in the middle of a page, and one thing or another?

A. Yes; there possibly wasn't any cost of consideration shown in this particular book, and therefore the boys left out the word "consideration."

5099. Q. Now then, will you check that and find out the reason for it?

A. Yes, sir.

TRIAL EXAMINER. As I understand your explanation, these are not general statements over here in column 7, but are applicable to actual situations, is that correct?

The WITNESS. No; they are general statements, but apparently Book 22—and by "Book 22" I mean the Original Cost 22, where all those costs are set up in separate columns—did not show any consideration expensed.

TRIAL EXAMINER. And those in book 21 do show consideration expense?

The WITNESS. Yes.

Mr. MILDE. That is for one or two leases?

The WITNESS. That is right, that is apparently what has happened.

TRIAL EXAMINER. The difference, then, is with respect to one or two leases?

The WITNESS. Yes; we are just talking about $15 now.

By MR. SLAFF:

Q. Was the rest of this exhibit prepared with the same care, Mr. Antonelli, as went into the preparation of that part of the exhibit that deals with Account No. 330-2?

A. Well, the rest of the exhibit shows definitely what the items are. This was the only one that we had a general
5100 statement on, on account of the large typing job.

Q. That isn't the question. The question I put to you is: Did the people who prepared this exhibit, and you in supervising the preparation of the exhibit, devote any more care to that portion of the exhibit that deals with other accounts, than you did to that portion of the exhibit that deals with Account 330-2?

Mr. Milde. I object.

Trial Examiner. The objection is overruled.

The Witness. I would say that the whole exhibit was prepared with great care. We didn't try to do one account better than the other account, and it was all prepared with great care.

By Mr. Slaff:

Q. I mean, whether it was prepared with great care or not is perhaps something that someone else other than you and I will judge, but at least it was all prepared, in your judgment, with the same degree of care throughout?

A. Yes; there wasn't much to do but record these costs from the original cost books. There wasn't any trick involved in summarizing these books.

Q. Of course, whether or not there was a trick involved is also another question?

A. Well, there wasn't.

Q. Then, as I understand your answer, and I don't know
5101 whether you answered my question, but as I understand it you didn't put any special care on one part of the exhibit as against another, it was all prepared in the same general way?

A. That is right.

Q. Now will you turn for a minute to page 356. You show there, do you not, in the first four items, expenses in connection with Line H-2?

A. Yes, sir.

Q. When was that line laid?

A. The line was laid in 1902.

Q. When was the first amount shown in column 2, of $219.60, spent by the Hope Company?

A. In December 1902.

Q. And what is the voucher reference on that?

A. M-225, 1902. The amount is $15.07.

Q. Now is the total of $219.60 made up of several items?

A. Yes, sir.

Q. All expended in December of 1902?

A. No, sir; the first one was in connection with freight and it happened to be in December 1902. The amount was $15.07.

Q. All right, when was the next?

A. The next one was——

Q. (Interposing.) And by the way, to what account was that amount charged?

A. Well, it was charged to expense, I don't know the
5102 account.

Q. It was charged to an operating expense account number?

A. It wasn't capitalized, it was charged to expense.

Q. Just a minute, Mr. Antonelli. Was it charged to an operating expense account?

A. I think it was; yes. I don't know, but I am certain it was; I would have to check it.

Q. Well, will you check it and tell us to what operating expense account that amount was charged?

A. Yes, sir.

Q. Now when was the next item going into that total of $219.60?

A. The other item pertains to a labor expense and has a voucher number H–126, 1902, for $4.34, probably in August.

Q. Of what year?

A. They are all 1902.

Q. Tell me this: Were all of these items going into the total of $219.60 charged to operating expense accounts?

A. I think they were; yes.

Q. Now going to your item of $18,323.64, when was that incurred?

A. Well, I think that was incurred in 1905 or 1906, I am not exactly sure of the date, but it was two or three years after the line was laid.

Q. And what was the nature of the work in connection
5103 with which that expense was incurred?

A. Well, that was in connection with clamping this 18-inch line going to Cleveland.

Q. And to what account or accounts were the expenses that went to make the total of $18,000, charged?

A. I think they were charged to operating expense. I will have to look that up this noontime, and I will let you know.

Q. That is made up, is it not, of a great number of vouchers for small amounts?

A. No; I think that is only one voucher, but I will check it.

Q. Will you check that?

A. Yes.

Q. And will you also check the specific accounts so that you can tell us the specific accounts to which the expenditures were charged?

A. Yes.

Q. Now going to the next item on that page, 639 feet of 18-inch pipe of line H–2, when was the expense in connection with that incurred?

A. Well, I can't say that offhand, I will look it up. I can't remember all of these things, and I don't have my details here.

Q. All right, check that, please.

5104 Will you also check the item of $9,673.62?

A. I can tell you something about that.

Q. All right.

A. The $9,673.62 represents the cost of laying an additional river crossing.

Q. When?

A. I am sorry, I will have to look that up. I haven't got the information here.

Q. And you will tell us when, and also what accounts the items were charged to?

A. Yes, sir.

Q. Now going to page 357, and taking the largest item on that page, Clamps on pipe line H–2, the next to the last item, that shows an expenditure of $15,638.63, does it not?

A. Yes, sir.

Q. When was that expenditure made, do you know?

A. It was made, I would say, two or three years after the line was built.

Q. Made about 1906, wasn't it?

A. Somewhere around there, 1905 or 1906.

Q. And do you know whether or not that was charged to Account No. 2, repairs to lines?

A. No, I don't, but I will be glad to check it.

Q. You will verify it?

A. Yes.

* * *

5107 PETER ANTONELLI resumed the stand and testified further as follows:

Cross-examination (resumed) by Mr. SLAF:

Q. Now, Mr. Antonelli, in respect to the items we have been discussing on pages 357 and 356, are there specific vouchers in back of each of the expenditures there shown?

A. There are specific vouchers for the amount of approximately $58,000 out of $103,000 not included in the Federal Power Commission Exhibit 57.

Q. Are those specific vouchers for material costs or for construction costs, or for both?

A. They are for both. $15,638.63 is for equipment costs, and the rest of it, I believe, is mostly for constructing river crossings and replacing river crossings, and so on.

Q. How much did you say was for material costs?

A. $15,638.63.

Q. With respect to the difference between the amount for which you found specific vouchers, and the $100,566 total
5108 shown on page 358, how did you determine that difference?

A. This difference represents construction costs for extensions of the lines listed on these two pages, namely, 356 and 357. The material for these extensions was capitalized, and we didn't have any trouble in finding it, and found out what date they were installed, and so on——

Q. (Interposing.) If I may break in without interrupting your train of thought, you say you had no trouble finding the material costs. Did you have specific vouchers for that?

A. Yes, sir; we did.

Q. Well, let's start all over again, then.

Tell me first off, out of this total of $100,566.82, for how much did you have specific vouchers?

A. Well, approximately $58,000, and about $45,000 we did not have vouchers for.

I was looking at page 357.

Q. All right, $102,962, right?

A. Yes.

Q. And for $58,000 you have specific vouchers?

A. That is right.

Q. That leaves?

A. $44,000.

Q. For which you have no specific vouchers?

A. Yes.

Q. Now with respect to that $44,000, how did you
5109 determine the amounts which went into that total?

A. That is just what I was trying to explain before you interrupted me.

Q. Well, the explanation didn't seem to me very clear.

A. I have to give this kind of an explanation.

By going to the capital account for the main lines, we found that the Company has capitalized the extensions of these lines that are shown at pages 356 and 357. This list repesents mostly exten-

sions of initial installations, and as I said, the material was capitalized and recorded on the Company's books.

However, the labor for construction of these lines was not capitalized; only the initial installation of the lines was capitalized. By that I mean that when the line was laid, they capitalized both the material and labor; but with additions they, as a rule capitalized only the material.

Therefore, there was no way for me to find the actual construction costs of this extension. Therefore, it was necessary for me to estimate these costs, and they were estimated, based on known costs for similar lines in about the same period.

In other words, we summarized all of the costs of 10-inch pipe—transmission line I refer to now—and found out that for a certain period the cost might have been, say, 90 cents a foot, and
5110 we applied that 90 cents a foot against the 10-inch extension lines that were shown in here. That gave us a result which was very conservative, because, as everybody knows, extensions cost more money than the initial installation, but that was the best we could do, so we used this conservative estimate.

Q. Did you add anything to the known labor costs?

A. No, sir; I just used them as I found them on the Company's records.

Q. Did you add 25 percent to the known labor costs in this connection, or in any other connection, in your exhibit?

A. I don't know what you mean by 25 percent overhead cost; I didn't add anything but the costs as I found them on the Company's records.

Q. Did you increase your labor costs, as found in the Company's records, by 25 percent in any case in the preparation of your estimates?

A. Well, I don't understand your question—which estimates?

Q. The ones that you are referring to now and those that were made in connection with Exhibit 60.

A. Are you referring to Account 353?

Q. I am referring now to any of the estimates made in Exhibit No. 60.

A. I thought you were talking about Account 353.

Q. Well, I am asking you a general question now.

5111 A. Well, I haven't added any overheads.

Q. I didn't ask you whether you had added any overheads. I asked you whether you had increased the cost of labor, as determined from your analysis of the company's records, by 25

percent in any of the labor estimates that you made in connection with the items shown in Exhibit No. 60?

A. No, sir.

Q. You did not?

A. No, sir; I haven't added any 25 percent to the Company's records, no, sir.

Q. All right, let's leave page 357 for a moment—we will come back to that—and let's turn to page 72 of your exhibit.

Have you that before you?

A. Yes, sir.

Q. The first item there is Office and Warehouse, No. 9001, Concrete block wall, et cetera—is that right?

A. Yes, sir.

Q. And an amount is shown of $442.44, is that right?

A. Yes, sir.

Q. How was that amount derived?

A. In this case of this Office and Warehouse, No. 9001, the incompleted costs for this building (and by "incompleted costs"

5112 I mean that part of these costs were found on the Company's records and capitalized, and the amount shown here was not capitalized and not allowed by the Federal Power Commission), we were unable to find the cost of the concrete block wall, plasterboard and millwork, plumbing fixtures and electric lights in any of the investment structure accounts. Therefore, we estimated in this case the material cost and the construction cost.

Q. And you estimated the material cost——

A. (Interposing.) By using, for the material costs, vouchers for exactly the same kind of materials, maybe the voucher would be exactly for the same materials, but I couldn't identify it; but for the same kind of materials that were expensed. In other words, they weren't capital vouchers.

That gave us the cost of the material.

Now as far as the labor is concerned, we estimated the labor using the performances, the Company's performances. Those performances were again determined by analyzing several compressing station structures where we knew the actual cost of installing or constructing these compressing station structures. We picked those stations because we were certain that the costs were complete.

Now in order to simplify the work, we developed unit costs using just ordinary performances which weren't applicable to this particular Company, but just ordinary performances.

Q. That is from the Company records?

A. No, not yet; I am coming to that.

5113 Now to these performances we applied the actual labor rates that the Company pays, and we got a unit cost. Then we applied those unit costs to the material, the quantity of materials for these stations that we knew the actual cost. Then we totalled them, then we divided this total into the total of the actual costs of the compressing station structure that we did know, and the percentage varied from 20 to 30 percent, or something like that. So we decided to use 25 percent.

In other words, we added 25 percent to this performance we had worked up to equalize them to the performances of the Company, and I think that is what you had in mind.

Q. After analyzing the Company's records and developing unit performances, and developing labor costs per unit, you then added 25 percent on top of that to the labor costs, did you not?

A. No, sir.

Q. Well, let's start again?

A. I didn't say that at all.

Q. You developed the material costs, did you not?

A. Yes, I developed the material costs.

Q. Then you proceeded to analyze the Company's records to determine your labor costs, right?

A. Yes; and I found——

Q. (Interposing.) Just a minute. And from that you

5114 determined the labor performances?

A. No, sir; I didn't; I didn't say that.

Q. Well, did you or did you not?

A. No.

Q. Were your labor costs developed as a ratio of material in any cases?

A. I don't know what you mean by "ratio."

Q. Mr. Antonelli, don't you know what a ratio is?

A. Well, not in this sense, no.

Q. Well, do you know what a ratio is, just a plain ratio?

A. Well, a ratio is a relation between one thing and another.

Q. Then you know what ratio is?

A. Yes.

Q. Did you develop labor costs as a ratio to material costs in any instance?

A. I found, in the case of compressing station installation costs, the relationship between the total construction costs and the total

material costs of the initial installation before retirement, to obtain the relation of labor to material; yes, I did.

Q. Then you did develop a ratio, you did develop labor costs as a ratio of material costs, is that right?

A. Well, not in the sense of the way you are saying it.

5115 I found out what was the relation, say, in a compressing station, between the labor and material. Say the relation was 25 or 30 percent. I used that as a basis in some cases to price certain items; yes.

Q. Now in what cases?

A. That is in the case of compressing station installation costs.

Q. Now what ratios did you develop?

A. Well, they vary according to the station and the year and the type of equipment, and so on. We didn't just take one ratio, we made sure that we got what was right.

Q. Let's confine ourselves for the minute to Office and Warehouse, No. 9001.

Did you determine your labor cost by the application of a ratio to your material costs?

A. No, sir.

Q. You did not?

A. No.

Q. Did you in the case of any item contained in Account No. 331-3?

A. Well, there are so many items, I don't know, but I don't think so. I can't say offhand, but I don't believe so. There might be an item here and there.

Q. Will you bring in Book No. 136 this afternoon?

A. Yes, sir; I will be glad to if it is here.

Q. Well, if it is not here, send for it.

5116 A. All right.

Q. Did you make a study, in connection with this and other items—and I am referring to 9001, Office and Warehouse—of the Company's labor performance, by years and by districts, from the Company's records?

A. I think we did, not in the case of this account, but I believe in the case of the Account for the Measuring and Regulating Structures.

Q. How did you determine the labor performance to estimate the construction cost of this Office and Warehouse, No. 9001, shown on page 72?

A. As I explained it—do you want me to explain it again?

Q. Well, you explain it.

A. We have developed unit costs. That was the basis of it.

Q. Did you develop unit performances for specific types of activity?

A. Yes, sir; we did.

Q. And was that from the Company's records?

A. No, sir.

Q. Now what was that from?

A. That was a general engineering performance, the general engineering performances that we use for estimating purposes——

5117 Q. (Interposing.) Well, weren't you developing Hope Company's costs and not general costs?

A. Yes; but you didn't let me finish. I was going to tell you what we did after that.

Q. Go ahead.

A. We got these general performances and we did that just as a matter of convenience. There were so many small items of this type, and we had to finish the job, the Company was pressing me for time, and I had to do something about it.

So that is why we used these general performances.

To these general performances, which was just hours, we applied the Hope Company's labor rates.

Q. Where did you get those labor rates?

A. Those labor rates came from the Company's payroll vouchers and the Company's records, the genuine labor rates paid by the Company. That is the second step.

After that we applied this performance—now we have complete performance, cost per foot for laying brick, or what not—we applied these performances to three stations for which we actually knew the installation costs, and we knew the quantity of material that went into these stations. Of course, that was as of the date when the station was built. We totalled it, and say that this station came to a certain amount of dollars for installation. That was on one hand.

On the other hand, we had the total cost for installation 5118 of these stations that I referred to. Now, dividing one by the other we found out that these general performances were 25 percent, on the average, higher than what the Company's performances were.

Therefore, we increased the cost 25 percent. That was done as a matter of saving time. I could have done it the other way and avoided all these arguments now.

Q. Well, after developing general performances, units of performance, to which you applied the Hope Company labor rates, you then increased the total dollars thus derived by 25 percent, is that correct?

A. That is in the instances that I used the estimate.

Q. For example, in connection with the Office and Warehouse, No. 9001, you developed, did you not, a material cost of $270.04, and then a labor cost, on your general performances, of $172.40, which latter amount you then increased by 25 percent, which gave you a total of $442.44; that is correct, is it not?

A. I don't know the amount, but we did substantially that in order to get the performances of the Company.

Q. And that was in line with your conservative policy, is that correct?

A. Absolutely; yes.

Q. Now while we are on that subject, will you tell us where in the System of Accounts of the West Virginia Commis-
5119 sion or the Federal Power Commission, you find authority for making such estimates in determining the original cost of a natural gas company's property?

A. Well, I——

Q. (Interposing.) Constructed by you?

A. I find it in the definition of original cost.

Q. Which one is that?

A. That is shown on page 5.

TRIAL EXAMINER. That is the West Virginia Code?

The WITNESS. It is both West Virginia and the Federal Power Commission.

Mr. SLAFF. Page 5 of the West Virginia System of Accounts. The definitions are the same?

The WITNESS. Yes.

It says: "Original cost as applied to gas plant means the cost of such property to the person first devoting it to public service."

By Mr. SLAFF:

Q. What does definition 10 say?

A. "Cost means the amount of money actually paid for property or services or the cash value at the time of the transaction of any consideration other than money."

Q. Where is there any specific authorization in the System of Accounts for making estimates?

5120 A. Well, there is at some place here. It is at some place on pages 48 and 49, it is a long time since I have looked at this book.

Q. Do you mean Account Instruction 2 (C)?

A. On page 38 it says, "Original cost under gas plant purchased"——

Q. (Interposing.) I am speaking now of original cost of plant constructed by the company.

A. Well, in order to get——

Q. (Interposing.) As long as you understand, go ahead and answer.

A. The only way to get the original cost is to get the full cost of the property, and if the full cost was not reported in the Company's books, we had to estimate it. I thought that was in accordance with the definition of original cost.

Q. Well, I asked you, Mr. Antonelli, whether you found any specific authorization for estimating the original cost of plant constructed by the utility, in the Uniform System of Accounts?

* * *

5125 "Q. Well, I asked you, Mr. Antonelli, whether you found any specific authorization for estimating the origi-
5126 nal cost of plant constructed by the utility, in the Uniform System of Accounts?"

The WITNESS. You refer to property constructed by the Company?

By Mr. SLAFF:

Q. That is right.

A. I can't recall offhand. There might be something in the books, but I can't recall offhand as to property constructed by the Company, but it was evident that if I was attempting to get the complete costs of the property, and the amount of money the Company actually paid for this property, I had to do just what I did, and determine the full cost of these properties. There are no two ways about it, and that was my problem, to get the actual amount, the amount that the Company actually spent for these properties; and if I couldn't find the cost for certain negligible items, I estimated, and made my estimates based on Company costs.

Q. Well, it is a fact, is it not, Mr. Antonelli, that to the best of your knowledge there is no specific authorization in the System of Accounts for the estimating of costs of property constructed by the utility?

A. I don't know, I don't recall; I will have to refresh my memory about that.

Q. Will you do that and tell us?

5127 A. Yes.

Q. And it is a fact that as far as you know at this time, it is only with respect to the determination of original cost of property acquired as an operating unit or system that the estimating of such costs is permitted by the Uniform System of Accounts of the West Virginia Commission or of the Federal Power Commission, isn't that correct?

A. I don't know, I can't answer that question. I know that practically every company in the country making an original cost study, and not having the actual cost of the property constructed by the company, is using the same method I am using, and they had to estimate it, there is no other way to get it if it isn't on the books.

Q. In respect to this last answer of yours, do you mean that practically every utility company in the country, or most of them, that are making original cost studies, are following methods similar to yours?

A. They are trying to follow methods similar to ours, but some of those companies haven't got——

Q. (Interposing.) Which ones?

A. I can't mention companies; I don't know.

Q. Well, but you just told me that practically all of them were trying to follow the same methods that you have followed. Now would you please name five of those?

A. Well, I could not name five of those.

5128 Q. Can you name three?

A. No; I wouldn't like to mention any names.

Q. Don't be modest or reticent, Mr. Antonelli, this is a public record.

A. I do know——

Mr. MILDE (interposing.) That is just the point.

By Mr. SLAFF:

Q. It is a matter of public information, they all have to be filed with the Commission.

A. I know that they don't have the information.

Q. How do you know if you haven't investigated?
A. That is what they told me.
Q. Who told you?
A. Various men working on the jobs.
Q. What jobs?
A. Various jobs, original cost jobs.
Q. What original cost jobs?
A. Well, I am sorry, but I can't disclose names.
Q. Is it a confidential matter?
A. No; I am just giving you examples.
Q. Well, you haven't given us any examples, Mr. Antonelli, and I am asking you to name five of these original cost jobs that are being done where the same methods that you have used are being followed?
A. I said they were trying to follow.
5129 Q. That is right, where they are attempting to follow the same methods?
A. The Manufacturers Light & Heat Company is trying to follow the same methods, as far as I know now. It is hearsay evidence, because that is what they tell me they do. And the South Penn Oil, I think, is doing the same thing.
Q. Who else?
A. I thought some of the Philadelphia boys, the Philadelphia company.
Q. Is that the Pittsburgh Company?
A. Yes.
Q. Any others?
A. Well, I can't recall offhand.
Q. Are any of those jobs being done by Ford, Bacon & Davis?
A. No, sir.
Q. Now who told you, with respect to the Manufacturers job, that they were following generally the same methods that you followed?
A. Nobody told me, but I was down there examining some of the Company's records in regard to another matter, and I saw they were doing practically or approximately the same kind of work.
Q. And those three companies that you have named are all you can name at this time, is that right?
5130 A. Yes, sir.
Q. All right.
Now then, let's get back to the System of Accounts——

TRIAL EXAMINER (interposing). But you learned they were doing it this way before or after you did this job?

The WITNESS. Oh, after, way after. I mean, what they were doing is that they were analyzing vouchers and making unit costs, determining unit costs based on vouchers, and there was considerable estimating done because they didn't have the records. I have been to those companies in connection with other work, and I know they don't have records, and there is no way to get it from the company's records, except to estimate it.

By Mr. SLAFF:

Q. Mr. Antonelli, hasn't the Hope Company, ever since it has been under the regulation of the West Virginia Commission, been required to keep its books on the basis of cost?

A. I don't know, I can't tell you.

Q. Mr. Antonelli, do you mean to tell us you didn't investigate that before you began your original cost—call it determination?

A. It wasn't necessary. What I did was that I prepared an accurate inventory of the Company's properties; then I went to the Company's records, I didn't care what kind of records
5131 they were, I was trying to find the actual cost of each item, how much the Company paid for these items. We wrote to the various predecessor companies and got the costs from them, and so on. I didn't care how the Company kept it on their books or what they were doing, that wasn't my job, I had a lot of other things to worry about.

Q. Let's see, you worried about the present System of Accounts, because you made your original cost study, as you tell us, in accordance with that System of Accounts, is that right?

A. I followed the general accounting principles set forth in this Code of Accounts, yes. I used the same account numbers and tried to classify the properties in the same order.

Q. What distinction are you making between following the System of Accounts and following the same accounting principles as are set out in the System of Accounts?

A. Well, as I tried to tell you, I set up the properties, classified the properties in accordance with the investment accounts shown in this book, and then followed the principles as to material and labor and overheads.

It states here that you should include with the material, the labor, include its proportionate overhead and construction costs, and so on. I did all of that.

Q. Then you did follow, in making your original cost determination, the System of Accounts prescribed by the
5132 West Virginia Commission and prescribed by the Federal Power Commission, is that correct?

A. Yes, and also I followed the definition of original cost which says that the original cost is the full cost of the property.

Q. Well, let's see if I understand you. You didn't pick and choose out of the System of Accounts as to what you were to follow and what you were to disregard, is that correct?

A. Well, what I did——

Q. (Interposing.) No, Mr. Antonelli——

Mr. MILDE (interposing). Let him explain.

By Mr. SLAFF:

Q. Let me repeat my question, and you tell me whether you can answer it yes or no. Did you pick and choose out of the System of Accounts, certain parts thereof that you would follow, and certain parts that you would disregard?

A. No, sir.

Q. Now let's get to the next question.

A. Well, I would like to qualify my answer now.

Q. Go ahead and qualify it if you want to tell us you did pick and choose.

A. What I did, my first purpose was to determine the original cost, the full original cost of these properties.

5133 TRIAL EXAMINER. Regardless of what the System of Accounts said?

The WITNESS. That is right. I was asked to find out, to go to all records and everywhere and get the actual cost of these properties, how much money this company spent for these properties, and how much the predecessors paid for prior utilities. That was my first purpose.

Then I went to this System of Accounts and said—we are going to use this original cost for other purposes, setting up the books, maybe, in another form.

So in order to help, at least utilize part of this work for other purposes, we set it up using this Code of Accounts shown in here, and classified the property in accordance with this Code of Accounts, and included each item of equipment, each proportion of the installation cost and overheads, and so on.

That was all necessary for setting up the continuing property records. So I could kill two birds at the same time.

TRIAL EXAMINER. In other words, you first decided, irrespective of the System of Accounts, how much you wanted to set up, and then you used the System of Accounts so far as practicable in splitting it up and setting it up; is that the effect of your statement?

The WITNESS. Well, in effect, that is correct. My first reason was to get the original cost of these properties.

5134 By Mr. SLAFF:

Q. Then it is a fact, is it, that in your original cost determination, as you ultimately came to it, you did disregard certain of the portions of the Uniform System of Accounts prescribed by the West Virginia and the Federal Power Commissions?

A. Well, I think there is just one paragraph here where it says about not intended to estimate. I didn't pay much attention to that because it just didn't mean anything to me. How could you determine original cost if you couldn't estimate? It just couldn't be done. If you had to get the total original cost, you had to estimate.

Q. In other words, are you referring to Utility Plant Instruction 2 (B) which states that the cost of the utility of its utility plant shall be ascertained by analysis of the utility's records?

A. Yes.

Q. That instruction in the System of Accounts you disregarded; isn't that correct?

A. Where is that?

Q. At page 48 of the West Virginia Code of Accounts and page 37 of the Federal Power Commission Uniform System of Accounts.

A. Yes; that is right.

Mr. SLAFF. Read the question and the answer, will you, Mr. Reporter?

5135 (The record was read by the reporter.)

Mr. MILDE. I wonder if you won't be fair to the witness and tell him whether you mean all of Instruction 2 (B) or one sentence of it, or what?

Mr. SLAFF. Instruction 2 (B). If he wants to qualify it, let him go ahead and qualify it. He is perfectly able at qualifying, as he has demonstrated this morning.

Do you want to qualify your answer, Mr. Antonelli?

The WITNESS. There isn't anything to qualify. I said I determined the original cost of these properties, and I followed.

this Code of Accounts as much as possible, except that I estimated all of the items that I couldn't find in the Company's books or expensed.

* * *

5136 PETER ANTONELLI resumed the stand and testified further as follows:

The WITNESS. Before we start, I would like to make a correction here to your last question.

Mr. SLAFF. Go ahead.

The WITNESS. You asked me if I had disregarded Instruction 2-B in this new code of accounts and I would like to make it clear that the only portion that was disregarded is the last sentence starting with "It is likewise not intended that adjustments shall be made," and so on.

Cross-examination (cont'd) by Mr. SLAFF:

Q. Well, then, you did pick and choose as to what parts of the system of accounts you would follow and what part of this system you would not follow. Is that right?

A. Well, I determined the original cost.

Q. No, no that isn't the question I asked you, Mr. Antonelli. The question I asked you is this: It is a fact, is it not, that you did pick and choose as to what part of the system of accounts you would follow and what part or parts you would disregard?

A. Well, the only part that I disregarded is the
5137 part that I just mentioned.

Q. And that was a deliberate policy of disregarding that portion of the system of accounts. Is that right?

A. Well, if I hadn't done that, I couldn't have determined the original cost correctly.

Q. That is not the question, Mr. Antonelli. The question is this: Your disregard of that portion of the system of accounts was a deliberate policy adopted by you in making your determinations. Isn't that so?

A. Well, I disregarded that part; yes.

Q. Well, then, it was a deliberate policy which you adopted ——

A. It wasn't a policy.

Q. Just a minute. In making your determination was it not?

A. Well, I will say yes, then.

Mr. MILDE. Mr. Slaff, Mr. Antonelli can report on those questions that you asked him to get at noon.

By Mr. SLAFF:

Q. I think we might get that into the record now, if you have the information.

A. Where are the large books?

(Document furnished witness.)

By Mr. SLAFF:

Q. Have you during the noon recess, Mr. Antonelli,
5138 checked certain matters which were discussed this morning and which you now wish to report on? If so, will you go ahead?

A. Yes, I did. Now, in connection with Account 353, Mains, you asked me in reference to the first item pertaining to Line H-2, $219.60. You asked me as to when those charges occurred and what account they were charged to. The charges occurred in 1902 and 1903 and were charged to Account 11 and Account 14.

Q. And what are Accounts 11 and 14?

A. Well, 11 is conduct. It is named "Conducting-Maintenance" and 14 is "Conducting-Telephone."

Q. Did you say "conducting"——

A. (Interposing.) Conducting, c-o-n-d-u-c-t-i-n-g, conducting.

Q. Does that mean operating, maintenance?

A. Yes.

Trial EXAMINER. Those are West Virginia account numbers, are they?

The WITNESS. These are company accounts, that is way back in 1902 and '3.

Mr. MILDE. There weren't any West Virginia account numbers until 1923.

The WITNESS. The next one was in connection with the next item, Line H-2, showing $18,323.64.

5139 Mr. MILDE. What page is that on?

The WITNESS. Page 356.

That charge occurred in 1906 and it was charged to Account No. 2.

By Mr. SLAFF:

Q. And what was that account?

A. Repairs to Line. The next item is in connection with 639 feet of 18-inch pipe in Line H-2 amounting to $1,245.10.

Mr. MILDE. You mean the construction cost?

The WITNESS. The construction cost—I was coming to it—of 639,000 feet of 18-inch pipe.

By Mr. Slaff:

Q. How many feet?

A. Six hundred thirty-nine feet. Of this footage 316 feet were constructed in 1937 and 323 feet in 1938. No cost was found on the company records.

Q. No cost for what was found?

A. For the construction of these 639 feet.

Q. Yes; and to what account?

A. I don't know. I had to estimate it.

Q. I see. That $1,245.10, then, is an estimated cost, not a voucher cost. Is that right?

A. That is correct, yes.

Q. All right.

5140 A. The next amount is in regard to $9,673.62. That is for the construction of river crossing that took place in 1919 and it was charged to Account 21-D and 23-B.

Q. 21-D?

A. And 23-B.

Q. 21-D is maintenance of transmission line equipment. Is that right?

A. Well, it is marked "Dredging."

Q. Well, what does the account cover?

A. As far as I can determine it just says "Dredging."

Q. Well, is it a subaccount of any other account?

A. It is a maintenance account.

Q. Yes. And what about 23-B? What is that?

A. Well, it is called "Labor"; again maintenance, transmission and labor.

Mr. Milde. I thought you said that figure was 1929. Did you read it 1919?

The Witness. Did I say 1919?

Mr. Slaff. You did.

The Witness. I am sorry, it is 1929.

The next item shown on page 357 pertains to the claims on Pipeline H-2 and the amount of $15,638.63. This charge occurred in 1906 and it appears under Account No. 2, "Repairs to Line."

By Mr. Slaff:

5141 Q. I think that covers what you are requested to furnish with respect to Account No. 353, does it not?

A. Yes, sir.

Q. Is there anything else you have to report on now?

A. Yes, sir; in connection with one of the structures that appears at page 73, I think.

Mr. MILDE. What page?

The WITNESS. Page 73. That was in connection with Building 9,060.

By Mr. SLAFF:

Q. That is right.

A. I looked up this building in my original costs and I have this original cost determination book in front of me and the charge to that building was not included in the Federal Power Examiner's Exhibit 57.

Q. May we have your work book that you are looking at now, please?

A. Do you want to see it?

Q. Yes.

(Book furnished Commission's counsel.)

By Mr. SLAFF:

Q. Your work book shows, does it not, for that building, cost capitalized for company's books of $325.51?

A. It shows the amount of $325.51 under the cost capitalized by the company. Now, that particular item is only a inven-
5142 tory item. In other words, it is shown on their inventory voucher M-181-1920, which was a reclassification voucher in 1920 and it does not pertain to this particular building at all, we had to throw it out. We just disregarded this voucher because the cost shown on the books for this item is not the cost of this particular building.

Q. The problem now, Mr. Antonelli, is not whether you disregarded the $325.51, which your book shows as cost capitalized for that storage shed No. 9060, but whether, as you stated this morning, the Federal Power Commission examiners disregarded that amount.

A. Yes; they did because they accepted our adjusted book cost of a structural account and that as you notice there is zero adjustment for that particular building.

Mr. MILDE. You mean adjustment to zero?

The WITNESS. To zero; yes.

By Mr. SLAFF:

Q. On what journal entry did the Federal Power Commission examiners take that $325.51 out?

A. Well, I can't tell that, but I know that the adjusted book cost as shown by the Federal Power Commission is the same as ours. In other words, the $1,800,000 that they allowed us is the same figure as we had.

Q. Now then, did you make any determination with respect to this specific item and the $325.51 which was cost capitalized
5143 on your company's books for that storage shed as to whether or not the Federal Power Commission examiners did exclude that amount?

A. I did not have to make such a determination; no sir.

Q. You mean you arrived at a conclusion, then, that they had excluded that amount without making any specific determination with respect to it. Is that correct?

A. Well, they must have, they accepted by adjustment.

Mr. SLAFF. Will you repeat the question, please?

(Whereupon, the last question was read by the reporter.)

The WITNESS. Yes.

By Mr. SLAFF:

Q. Now, where is the adjustment with respect to this item of $325.51?

A. Whose adjustment?

Q. Did you make any adjustment with respect to it?

A. Oh, I don't understand what you have in mind, what adjustment?

Q. You have stated, have you not, that this $325.51 was excluded by the Federal Power Commission examiners. Is that right?

A. They must have excluded it, if they accepted our adjustments.

Q. Now, was it stated in your working papers as "Cost capitalized per company books"?

5144 A. Will you repeat the question?

Q. Yes; was it stated in your working papers as "Cost capitalized per company's books."

A. Yes, sir.

Q. And do you know whether or not the Federal Power Commission examiners accepted that amount as cost capitalized per company's books?

A. I know that they did not accept that amount as cost capitalized per company's books because they accepted our adjusted book costs as I determined them.

Q. What adjusted book cost of yours did they accept?

A. They accepted the $1,800,000 adjustments made for property constructed by the company or purchased from other utilities.

Q. Were those your inventory adjustments?

A. They were all kinds of adjustments.

Q. And you say included within that adjustment was this amount of $325.51?

A. I assume so; yes.

Q. Well, don't you know?

A. Well, no; I don't know what the Commission——

Q. (Interposing.) Well, is all your testimony as to what they excluded with respect to this item pure assumption?

A. No; it is a fact that they accepted all of our adjustments.

5145 Q. Well now, is this specific item included in that adjustment?

A. Well, I will have to look up the working papers and I will let you know.

Q. All right, look that up, if you please.

A. All right.

Q. Now, do you have any other matters that you wish to report on?

A. That is all I have at the time being.

Q. Now then, returning to the matter of estimates of original cost which you made and particularly with respect to estimates of labor cost, you testified this morning, as I recollect, that you developed certain performance rates. Is that correct?

A. For certain billing of structure accounts.

Q. Yes, now on what basis did you determine those performances?

A. Well, I already explained that this morning.

Q. Well, as I understand your explanation, it was some kind of engineers' estimates of performance. I am trying to get the specific basis for those performances.

A. Will you explain the question a little clearer, please? I don't understand it.

Q. Surely. I will be glad to. You say you developed cer-

5146 tain rates of performance for different kinds of work. That is correct?

A. Yes.

Q. Now, what I am trying to get from you is from what underlying data you developed those rates of performance. Was a study

made of other companies, studies made of performances at other times, and so on?

A. Well, there are so many questions in the question you ask me. What do you mean by "rates," first?

Q. Well, all right. Let's take any specific item for which you developed performance rates. Did you develop performance rates in connection with the work, the construction work shown on page 72? Let us go back to that.

A. Yes, sir; I did.

Q. You did. All right. Now, for what items, with respect to the first item shown under the "Office and Warehouse, No. 9001," did you develop performance records?

A. I developed performance rates for the portion pertaining to the construction cost of the items that were not allowed by the Commission in connection with this office and warehouse building.

Q. All right, let's see if we can get that a little more specific on the record. Did you develop performance rates for installation of concrete work, a concrete block wall?

A. Yes, sir; I did.

5147 Q. Performance rates for plaster boarding?

A. Yes.

Q. For installing plumbing fixtures?

A. Yes, sir.

Q. And for installing electric lights?

A. Yes, sir.

Q. All right, and similarly for other work you also developed performance records?

A. Yes, sir.

Q. Now that, Mr. Antonelli, is what I mean by performance rates that I have been talking about. Now will you tell us from what underlying data you developed those performance records?

A. The performances as far as the time required to construct these items, I am talking about the hours and so on, were based on information that Ford, Bacon & Davis has in their files. Now, to these performances we apply labor aids which came from the Hope pay rolls named "Pay Roll Vouchers."

Q. Just on the performances?

A. I am not through yet. Now is the part where we deviate. Now, that was the first job that I did. Then I listed the cost of three compressing stations and I was certain that the cost as far as construction cost is concerned was complete.

5148 I also had the quantities of materials that went in this compressing station structure. I applied this performance that I just described to the figures of these three compression station structures and I obtained a total and I divided this total into the total construction cost, actual construction cost, of these stations and I found out that I had to increase these performances that I have just described and cost that I have just described 25 percent together in line with what were the actual performances in cost of Hope Company.

Q. Well now, where did Ford, Bacon & Davis get the underlying data from which you developed your first performance rate?

A. It doesn't make any difference, I could have done it from any——

Q. (Interposing.) It does make a lot of difference, Mr. Antonelli. Now will you tell us where Ford, Bacon & Davis got those performance rates?

A. They got that from their experience. They have all kinds of construction work. It is their own, Ford, Bacon & Davis, experience.

Q. Now what is that supposed to represent? Is that supposed to represent the average construction experience on jobs done or supervised by Ford, Bacon & Davis?

5149 A. No, sir; it is general average perforances used for constructing structures and buildings.

Now that was adjusted upwards or downwards to conform with actual performances to various jobs that we do. In this case we had to adjust it 25 percent to get it to the performance of Hope Natural Gas Company.

Q. Yes; so you have told us several times, but we are not up to the point of adustment yet, Mr. Antonelli. Have no fear, we will come to it.

Now, before we get to that point I want to know from what specific data Ford, Bacon & Davis develops its performance rate.

A. Well, that is from their own experience in connection with other work that they have done, actual construction work they have done.

Q. Then, that is the actual rate of performance on other actual construction work done or supervised by Ford, Bacon & Davis. Is that correct?

A. Yes; large jobs—very large jobs—and it might be in a different part of the country; I don't know. It doesn't apply in that case to the Hope construction.

Q. Well, do you know where or what job, from what jobs those were developed?

A. No, sir; I don't.

Q. I see. Then as far as Hope's construction was con-
5150 cerned, it is piecemeal construction, if you please, that was by way of performance, at least, 25 percent less efficient than the performance that Ford, Bacon & Davis had observed in jobs which it had done or supervised. Is that correct?

A. No.

Q. It is not correct?

A. No, sir.

Q. For the Ford, Bacon & Davis rates were, you told me, developed from actual jobs?

A. Rates, I didn't mention anything about rates.

Q. The performance rates.

A. Oh, excuse me.

Q. The performance rates were developed from actual jobs done or supervised by Ford, Bacon & Davis. Is that correct?

A. Well, they were based on the experience of actual jobs.

Q. Well, when you say they were based on the experience of actual jobs, don't you mean that those were the actual performances on those jobs as determined by Ford, Bacon & Davis?

A. Well, I will explain it. Now, we have in our office a department called "Valuation and Report Department" and we do a great deal of reproduction cost evaluation work, so we try to get our valuation work and the production cost figures
5151 as accurate as possible, as efficient as possible, as easy as possible and as fast as possible, so in the case of buildings, taking into consideration all the experience from our engineering department, we set up formulas for how much we will install in how many hours, say, it will take a bricklayer to lay a thousand bricks. It is set up in such a way that it can be varied up or down on individual jobs and location of the job.

Q. Now, how is it developed, Mr. Antonelli? That is the question which I have asked you and I am still trying to get an answer. Aren't the rates of performance which you have developed in your valuation department based upon actual performance observed by Ford, Bacon & Davis in jobs which it has done or supervised?

A. It is based on the experience of Ford, Bacon & Davis from actual jobs.

Q. All right. Now that experience from actual jobs consisted in recording actual performances in those actual jobs. Is that correct?

A. Many actual jobs, not one, but many actual jobs, yes.

Q. Is that correct?

A. That is correct.

Q. So then, the performance rates, which you have developed in your office files, are then the actual rates of
5152 performance on jobs done or supervised by Ford, Bacon & Davis. Is that not so?

A. No, sir. No, sir; I say thay were based on the experience of Ford, Bacon & Davis, that they got from these actual jobs, but it wasn't based on one job or any particular job.

Q. Mr. Antonelli, I haven't confined any single one of my questions—perhaps you don't understand properly—to any one job done by Ford, Bacon & Davis or to any specific job done or supervised. Now, will you listen carefully to the question, please, and see if you can answer it?

A. All right.

Q. Is it not a fact that the performance rates developed by Ford, Bacon & Davis are the rates of performance found by Ford, Bacon & Davis to exist on many jobs which it has supervised or done?

A. It doesn't apply to any particular job.

TRIAL EXAMINER. Will you read the question again, please?

(Whereupon, the preceding question was read by the reporter.)

The WITNESS. I want to stress that fact.

By Mr. SLAFF:

Q. I think we understand that part, will you read the question?

(Whereupon, the preceding question was read by the
5153 reporter.)

The WITNESS. I will say yes.

By Mr. SLAFF:

Q. All right, those are rates which exist over a wide spread of jobs that your firm has supervised or developed, as I understand?

A. Well, I want to make sure that it doesn't apply to any particular job.

Q. Well, would you call them average performance rates?

A. Average normal rates; yes.

Q. That is the actual, the average normal actual rates of performance that exist, that have been found by you, by your firm, to exist over many jobs? Correct?

A. That is right.

Q. Now, is it not a fact that the performance of the Hope Company, as determined by you, was at least 25 percent less efficient than these average normal actual rates of performance found by Ford, Bacon & Davis to exist in these many other jobs?

A. No, sir. Not efficient. You said efficient. I wouldn't say that. They were less, because of the holding conditions and the type of country and the fact that usually Ford, Bacon & Davis' performances are based on union men, union labor, while
5154 here the company could not get a very good man to properly locate it in remote places and it would be hard to attract real first-class carpenters or bricklayers. That is the main difference that makes the difference of 25 percent in cost. Another thing, this labor is here.

Q. Is what?

A. I mean the non-union labor rates are a little lower.

Q. Are you speaking of the rates of wage now?

A. Yes, wage.

Q. We are not at this time, you understand, discussing wage rates, Mr. Antonelli. We are simply discussing performances.

A. Yes.

Q. Well then, to put it another way, if I withdraw the word "efficient," to do the same work in the Hope Company, it took 25 percent more labor than to do the work for various units as developed by Ford, Bacon & Davis?

A. It took them 25 percent more time, because, as I said, the stations are located in remote places and it takes longer to get there and to come back again. I am not talking about present conditions, I am talking way back in the history of the company, the roads were not so good and it really did take a longer time to construct this building than the performances used by Ford, Bacon & Davis for up-to-date type of construction work.
5155 Now, you say you compared the perfomance rates developed by Ford, Bacon & Davis with the actual rates of performance found in the three buildings of the Hope Company, is that correct?

A. No, sir.

Q. Well, tell us how this comparison of Ford, Bacon & Davis performance was made with company performance to bring about the 25 percent adjustment.

A. Well, I have repeated that four times now, but first of all we applied to those performances the labor aids of Hope as to the day of constructing these three compressing stations, total compressing stations, and priced them, using these performances with the Hope labor aids and we obtained a total. Then we knew the total cost of these stations. I am referring now to structures again.

Now, we divided one by the other. We found that the actual cost was 25 percent higher than using this hypothetical performance.

Q. So from that you deduced that the performance rates developed by Ford, Bacon & Davis were higher by 25 percent than the actual performance rates which had gone into the construction of these three compressor station structures?

A. Not compressing station structures, I am talking about
5156 compressing stations, one at Cornwell, which was a large station, and another was—I will get the names of those stations.

Q. I wish you would, please.

A. Cornwell, Payne and Minnora.

Q. When was Cornwall—is that Cornwell or Cornwall?

A. Cornwell, C-o-r-n-w-e-l-l.

Q. Yes, when was that constructed?

A. I will have to look it up. I think in 1925. I am not quite certain.

Q. What about Payne?

A. Well, I will have to look them up. I don't remember offhand.

Q. Were any of these three stations constructed prior to 1920?

A. I am not certain, I will have to look it up.

Q. Do you have that information here?

A. No; I haven't.

Q. Now then, turning to your Account 353, "Mains," you said with respect to that this morning, if I remember your testimony correctly, that out of a total of some $102,000 summation on page 357, you had specific voucher references for some $58,000 and for $44,000 of construction cost you had no specific voucher references, but had estimated those costs. Is that correct?

5157 A. Yes, sir; that is correct.

Q. Now, those estimates were developed as the cost of similar construction for the same period. Is that it?

A. We summarized the costs of all transmission lines by size and kind by periods for which we knew the actual cost of construction, the actual amount paid by the companay for constructing those lines and we obtained the cost per foot for each size and kind of pipe and that cost per foot was the one that was used in case of the items appearing on pages 356 and 357. It is the actual cost, no estimates at all, the actual cost for constructing similar lines at about the same time and the same kind of pipe.

Q. Well, costs of other construction, of course. That is correct, is it not?

A. The cost of constructing transmission lines; yes.

Q. Not these specific lines?

A. Oh, no; if I had the costs I wouldn't have to estimate it.

Q. Now, Mr. Antonelli, can you tell us which takes more time, abstracting a lease or abstracting a deed?

A. Will you read the question?

(Whereupon, the pending question was read by the reporter.)

The WITNESS. Well, I would say it all depends on the deed
5158 or it all depends on the lease, I can't answer that question offhand.

By Mr. SLAFF:

Q. No; on the average?

A. I don't know, I can't answer that question offhand.

Q. You mean you are just not prepared to answer it. Is that correct?

A. Yes, sir.

Q. All right. Now, turning for a minute to your first account shown in this Exhibit 60, Account No. 330-1, where were the expenses in connection with the items there set out originally charged? Do you know?

A. They were charged to operations.

Q. And beginning right at the beginning with this account you there disregarded the Instruction 2-B of the system of accounts or at least so much of it as states that "It is, likewise, not intended that adjustments shall be made to record in utility plant accounts amounts previously charged to operating expenses in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts." That is correct, is it not?

A. Yes; I disregarded the last sentence; yes.

Q. Yes. Now, with respect to your Account 330-2, natural
5159 gas-producing leaseholds operated and unoperated, what is the situation with respect to the expenses in connection with those items?

A. Well, what do you mean by "the situation"?

Q. Well, were any items there previously charged to operating expenses or not?

A. I think they were.

Q. Do you know?

A. Well, I know the abstracting cost was charged to operation; yes, sir.

Q. And what about the other costs?

A. I don't know.

Q. What was the answer?

A. I say I can't answer.

Q. Now, with respect to Account No. 330-2, unoperated leaseholds, was any amount allowed by the Federal Power Commission examiners as consideration cost as far as the entire account was concerned?

A. I think that the Federal Power Commission included the unoperated leaseholds in Account 100-4.

Q. Well, was any amount included in that account as representing consideration cost for such unoperated leaseholds?

A. Included where?

Q. By the Federal Power Commission examiners.

A. I know, but where?

5160 Q. As part of the original cost of the property.

A. You mean as part of the $51,000,000 adjusted book cost?

Q. As part of the original cost of that property as determined by the Federal Power Commission examiners.

A. Original cost—I didn't know they had any original cost.

Q. Oh, Mr. Antonelli, quit stalling, will you?

A. No, I am sincere about it. Are you talking about the $51,000,000 or are you talking about the items that were adjusted out?

TRIAL EXAMINER. Whatever we have been talking about all the time.

The WITNESS. No; there are two things in there. We are talking about a $51,000,000 adjusted book cost that we have and they allowed some other items that they adjusted out.

By Mr. SLAFF:

Q. All right, let's get it this way just so you won't have any problems as to what we mean by the question. Did you inventory the leases, unoperated leases?

A. Did I inventory?

Q. Yes.

A. I obtained these lists from the company's records and made sure that they were in existence as of December 31, 1938,
5161 that, in effect, is an inventory of the unoperated leases as of December 31, 1938.

Q. And did you make a detailed list of each and every one of those?

A. Yes, sir; I did.

Q. Now, then, did you make any adjustment to the book cost as shown on the company's books of those leases?

A. We determined the original cost of those leases and, of course, the difference between the book cost and the original cost was the adjustment.

Q. Did you add an amount of $104,811 to the cost shown on the company's books for those leases?

A. Excuse me, I will have to get my papers.

Q. Please do.

Mr. MILDE. Mr. Examiner, on your point, when Mr. Antonelli is talking about the $51,000,000 he means the plant accounts including the operated leases, because the Federal Power Commission examiners in their $51,000,000 figure didn't include unoperated leases but had transferred those to Account 100-4. That may have caused some confusion and I thought I would clarify that.

Mr. SPRINGER. That is plant held for future use?

Mr. MILDE. Yes; and they have treated that another way with some interest.

The WITNESS. Yes; I did. Excuse me, repeat the ques-
5162 tion, please.

(Whereupon, the pending question was read by the reporter.)

The WITNESS. I would like to put it the other way. My original cost was $104,000 over and above the book cost. All right.

By Mr. SLAFF:

Q. That may be a different—I don't know the distinction, but it is all right.

A. Well, I determined the original cost and at the same time my purpose of showing the book cost was to show the relation between original cost and book cost.

Q. Where was that $104,811 determined? How was that determined?

A. That was determined in the same manner as we determined the original cost of the operated leases.

Q. And how was that?

A. By going to the company records and finding the costs of the first lease.

Q. And you had specific vouchers then——

A. (Interposing.) Excuse me.

Q. I beg your pardon, I thought you had completed.

A. The first lease by examining the vouchers and making certain that those were the costs for each lease that we have included in the original cost.

5163 Q. And you found specific vouchers for each and every lease which went in to make up that total of $104,811. Is that correct?

A. Yes, sir.

Q. And that amount was included by Federal Power Commission examiners in their determination of the original cost of gas plant, was it not?

A. It was not included in the adjusted book costs of $51,000,000. It was included as adjustments under Account 100–4, property held for future use.

Q. Well, it is in the total of the gas plant, the original cost of the gas plant as found by the Federal Power Commission examiners, is it not?

A. Not in the $51,000,000 that we are talking about.

Q. The $51,000,000, Mr. Antonelli, refers to the gas plant in service, does it not?

A. That is right.

Q. There is another gas plant of the company, is there not?

A. Yes, sir.

Q. That is gas plant held for future use. Is that not so?

A. That is correct; yes, sir.

Q. So that all the gas plant of the company is composed
5164 generally of two components, gas plant in service and gas plant held for future service. That is correct, is it not?

A. That is correct; yes.

Q. Now, in the total of gas plant, the Federal Power Commission examiners allowed this amount of $104,811 for consideration cost for leases unoperated, did they?

A. Yes, they did and classified it as property held for future use.

Q. And for those considerations you had specific vouchers, did you? Is that correct?

A. Yes, sir; I did.

Q. Did you have specific vouchers for showing the consideration for the other leases unoperated from which you derive a total of $4,088 as consideration cost?

A. Will you read the question.

(Whereupon, the pending question was read by the reporter.)

By Mr. SLAFF:

Q. Let me withdraw that question so it will be a little clearer on the record.

You have stated, have you not, that the total of $71,591 shown on page 62 was made up of abstracting, obtaining, recording, consideration and miscellaneous costs? Is that right?

A. Yes.

5165 Q. And within that total is $4,088 for consideration costs, is that correct?

A. That is correct.

Q. Now then, the question which I put to you earlier, do you have specific voucher references for the consideration costs going in to make up that total of $4,088?

A. No, sir; I do not have specific vouchers for this amount.

Q. Now, to what leases are those dollars applicable?

A. I have the information, but they are not available at the moment. I have them in my working papers.

Q. Now, how did you develop that total of $4,088?

A. It was based on the consideration of other leases acquired from the same county and I believe the same years as the leases, but we did not have the cost, the leases that make this $4,000.

Q. Now, how did you know that consideration was paid for these particular leases?

A. Oh, we have information in the files which shows that consideration was paid.

Q. It didnt' show the consideration, however, is that right?

A. The consideration was expensed and I could not obtain the actual cost so it was necessary to estimate.

5166 Q. Now then, with respect to these leases, you say the consideration was expensed but you have no voucher references for them. Is that right?

A. Yes.

Q. Now, you have a list, do you, of the specific leases?

A. I could produce a list of these specific leases: yes, sir.

Q. To what expense account were those costs charged, do you know?

A. No, sir; I do not.

Q. Well, how do you know they were expenses?

A. As far as I recall, my working papers show that they were expensed.

Q. Do your working papers show the account to which they were expensed?

A. Well, I will have to refer to my working papers to answer that question. I can't tell offhand.

Q. All right, will you do that?

A. Yes, sir.

* * *

5167 By Mr. Slaff:

Q. Now, Mr. Antonelli, I don't know whether we have specifically covered it or not, but the cost which you used for abstracting cost in Account 330–1 was an estimated cost, is that correct? That is at page 2 of your Exhibit 60.

A. The abstracting cost was not an estimated cost, it was based on vouchers and was supported by vouchers.

Q. Well, what vouchers?

A. Hundreds of vouchers.

Q. Well, it was an estimated cost, estimated from hundreds of vouchers for this specific abstracting of Deed No. 46,404?

A. No, sir; I explained yesterday, and I will explain it again, that the Company never kept the cost of each abstracting separately. Therefore, it was necessary for me to total all of the abstracting costs and divide it by the number of abstracts, to get an average cost.

5168 It is an allocated price, an allocated cost, and I did that for various periods, but it was supported by vouchers, and we have the vouchers, and I can tell you the name of the man that did the abstracting, and the date he did it, and how much money he spent for expense in connection with the abstracting, and his salary, and everything else.

Q. You can tell us the name of the man who abstracted Deed No. 46,404?

A. Absolutely, I have it right in front of me.

Q. What is his name?

A. C. S. Weaver.

Q. And how much time did he spent on abstracting Deed No. 46,404?

A. Well, I couldn't tell you that, but I can tell you how much he spent in total amount.

Q. No, we are confining ourselves to Deed No. 46,404, shown on page 2, and you arrived, did you not, at an abstracting cost in connection with that particular deed, of $47.40?

A. The $47.40 is the average allocated actual cost for abstracting for the period that this deed was acquired.

Q. Now we are confining ourselves to Deed No. 46,404. You used, in your Exhibit No. 60, at page 2, in columns 2 and 6, an abstracting cost of $47.40 for that specific deed; isn't that so?

A. Yes, sir; I did.

Q. Now do you know what the specific cost of abstract-
5169. ing that specific deed was?

A. I might surprise you and find it, because I think I have it. It is more than $47 ——

Q. (Interposing.) Oh, Mr. Antonelli, do you know what the specific costs of abstracting that specific deed No. 46,404 were? Do you know or don't you?

A. I don't, because the Company did not keep records of the specific costs for each abstracting.

Q. All right.

Now then, your amount of $47.40, as the cost of abstracting used by you, as the cost of abstracting that specific deed, is an estimate derived from costs of abstracting a number of deeds, is it not?

A. No; sir.

Q. Are you caviling or do you have objection to the term "estimate"; is that it?

A. No; it is an allocated actual cost of the deeds and leases that have been abstracted. It cost the Company so much per year to abstract leases, and they had so many leases abstracted. By dividing the number of leases into the cost, I got the average cost; and that was the only practical way to get it and get done in time.

Q. Mr. Antonelli, isn't an average cost an estimated cost, what is the difference?

A. Oh, not at all.

5170 Q. Well, then, it is the term "estimated" that you were objecting to; is that right?

A. Yes, sir. I know that this cost of $47.40 is actual cost incurred by the Company in abstracting.

Q. How much time did it take Mr. Doakes to abstract that specific lease or deed?

Mr. WILDE. Weaver was the name.

The WITNESS. Judging from the amount, he probably spent 5 or 6 or 7 days.

By Mr. SLAFF:

Q. Do you know?

A. Sure I know. I know his salary, and judging from that he probably did spend that much time, and that is the average time it takes to abstract leases and deeds.

Q. Now getting away from averages, Mr. Antonelli, do you know the specific amount of time that Mr. Weaver was engaged in abstracting Deed No. 46,404; do you or don't you?

A. No; I said no; no, sir; I don't.

Q. Then you don't know what the cost to the Company of abstracting this one deed was?

Mr. MILDE. I object to the question. It has been asked and answered twice before.

Mr. SLAFF. Well, it may have been asked several times before, but I don't know whether it has been answered.

TRIAL EXAMINER. Let him answer it again.

5171 The WITNESS. No; I don't, and I would like to qualify my answer by saying I don't know because the Company did not keep separate the costs incurred in connection with abstracting; but I do know the actual average allocated price for abstracting.

By Mr. SLAFF:

Q. And that is what this $47.40 is, your conception of the average allocated cost—right?

A. Yes, sir; and this isn't any different than the pipe lines, or anything else.

For instance, the pipe line might have had, say, 1,000 feet, and later on we find out that the line is only 500 feet. Say we find out as of December 31, 1938, that we only had 500 feet. Therefore, we allocate the cost of the 1,000 feet to the 500 feet.

Q. And that you——

Mr. Milde (interposing). You mean you wrote that out?

The Witness. Well, we wrote out the 500 feet.

Trial Examiner. You wouldn't call that an estimated cost?

The Witness. No, that is an actual cost, only half of the line was gone.

By Mr. Slaff:

Q. You did make estimates in connection with this Exhibit 60, did you not?

5172 A. Yes, sir; I did.

Q. But these costs you consider outside of the category of estimates; and these are not estimates, but average allocated costs, is that right?

A. You refer to abstracting now?

Q. Yes.

A. The abstracting I consider actual costs.

Q. Average allocated actual costs would be a complete statement—right?

A. Yes.

Q. Does that also apply with respect to leaseholds, Account 330-2?

A. Yes, sir; it does.

Q. Now did you obtain your average allocated cost for abstracting leases in generally the same manner that you obtained it for abstracting deeds?

A. Yes, sir.

Q. That is to say, for each year you took the number of leases abstracted, the number of men who worked on abstracting leases for the Company, their salaries, and divided the amount of dollars paid by the number of leases they abstracted; is that it?

A. Yes; and sometimes, and for some years, the Company had abstracting done by outsiders. In that case we will show the total cost of abstracting, lease by lease.

5173 Q. And again, you would not consider that you had estimated the cost of abstracting any of these leases?

A. No, sir.

Q. Now with respect to Account No. 330-5, Other Land and Land Rights, were your abstracting costs developed in the same manner as we have discussed with respect to the other two accounts?

A. Yes, sir; that is true with all the land and lease accounts.

Q. Will you tell me whether Ford, Bacon & Davis made a labor performance study of the construction in connection with the Hope property in 1929?

Mr. MILDE. I object to that. It is not relevant to any question in this case.

TRIAL EXAMINER. I can't see the relevance just at present.

Mr. SLAFF. If it is not developed as relevant, it will be subject to a motion to strike.

Mr. MILDE. I think we might have a statement by counsel as to how he expects to make it relevant.

Mr. SLAFF. At this point I prefer not to make such a statement.

TRIAL EXAMINER. All right, you may reserve the right to move to strike if it isn't properly developed. The objection is overruled.

Mr. MILDE. Note an exception.

5174 The WITNESS. Ford, Bacon & Davis, in their valuation of the Hope properties as of 1929, priced in detail all of the compressing stations and other structures, and I presume they developed unit costs, similar unit costs to those that I have referred to this afternoon.

By Mr. SLAFF:

Q. Getting away from your presumption, Mr. Antonelli, do you know whether they developed such unit costs?

Mr. MILDE. I object, on the same grounds.

TRIAL EXAMINER. The objection is overruled.

Mr. MILDE. Note an exception.

The WITNESS. I don't know offhand, no, sir.

By Mr. SLAFF:

Q. In your original cost determination in this case, did you make any investigation to determine whether, in 1929 or thereabouts, Ford, Bacon & Davis had developed any unit costs and performance rates for the Hope properties?

A. Yes, I did.

Q. And what did you find?

A. Well, I can't recall offhand. I will refer to my papers and let you know.

Q. Well, where is that contained in your papers?

A. Oh, it is contained in the 80,000 pages that we have in connection with this original cost determination.

Q. And are you meaning to tell us now that just at this
5175 moment you don't know that Ford, Bacon & Davis did

develop such unit costs and performance rates for construction on the Hope property at that time?

Mr. MILDE. Objection.

TRIAL EXAMINER. Overruled.

Mr. MILDE. Note an exception.

The WITNESS. I think they have, but I would like to make certain.

By Mr. SLAFF:

Q. I have no objection, Mr. Antonelli, I want you to understand, to your verifying your answers.

Now did you use those rates of performance in any way in connection with the estimation of performance for your original cost determination?

A. I can't say offhand, I will have to refer to my papers.

Q. Well, Mr. Antonelli, don't you know now whether you did use those performance rates, developed by Ford, Bacon & Davis specifically for the Hope property in 1929, in connection with your original cost determination?

A. No, sir; I don't know offhand.

By "performance" you mean again the hours and not the costs, is that it?

Q. That is right.

A. We might have, but I am not certain. I will have
5176 to examine the working papers, and I will let you know.

Q. Did you have anything to do with that 1929 valuation of the Hope properties?

A. I think so, but I don't recall, it is so long ago, and I can't tell. There are so many jobs that we are doing that I can't tell you offhand. I will have to refer to the working papers.

Q. I notice you listed in your statement of qualifications in your Exhibit No. 20, "The companies for which I have done work of the foregoing nature include the following," and then you refer to the Hope Natural Gas Company, at page 3.

A. But there were several Hope Natural Gas Company jobs, and I think this refers to other jobs, in 1937, maybe, or 1923, or something like that, and I can't tell you which one.

Q. While you are checking this matter of whether or not unit performances were developed, and whether or not you used them in connection with your original cost determination, will you also refresh your recollection as to whether you had any con-

nection with that 1929 valuation; and if so, what the natu
of your connection was?

A. I will be glad to.

Q. Now turning to Account No. 331-2, Field Measuring an
Regulations Station Structures, shown on page 69 of your Ex
hibit, can you tell us whether or not any of the costs involve
5177 in constructing those boxes or houses, were included i
the miscellaneous costs incurred in connection with tha
account?

A. Well, I don't understand what you mean by "miscellaneou
costs" included in that account?

Q. Well, in the structure account, in 331-2, isn't there a sub
account, "Labor, Teaming, Freight and Miscellaneous Costs"?

A. Yes, sir.

Q. Now tell us what is meant by "miscellaneous costs" in tha
subaccount?

A. I don't have any miscellaneous costs.

Q. What?

A. I don't have any miscellaneous costs.

Q. What is meant by the term "miscellaneous costs" in tha
subaccount?

A. I don't have any miscellaneous costs in this subaccount, I
have material and I have labor.

Q. Now let's start all over again, Mr. Antonelli.

There is a subaccount, "Labor, Teaming, Freight and Mis
cellaneous Costs"?

A. Not in this account; not the way I developed it; no, sir.

Q. No; I realize that, Mr. Antonelli, but on the Company's
books, in the Company's records, getting away from page 69 fo
the moment?

5178 A. I don't know what is on the Company's books.

Q. You mean you don't know anything at all about any
thing that is on the Company's books?

A. Yes, I do, but I couldn't remember just every account.

Q. I am not asking you to remember the specific details of
every account. Just getting away from your page 69, within the
Account "Field Measuring and Regulating Station Structures"
there is a sub-account, is there not, "Labor, Teaming, Freight and
Miscellaneous Costs"; isn't that so?

A. I don't recall. I can't say unless I look up the books and see

Q. Well, you told me just a few minutes ago there was.

A. No; I never said anything about this account having miscellaneous costs, unless you mean by "miscellaneous costs" the way we use it sometimes,—for instance, we have in a structure—not in this structure, but in other structures,—main items such as lumber and concrete and roofing, and so on, and then we have some miscellaneous costs such as fixtures or plumbing or that type. Is that what you have in mind?

Q. Mr. Antonelli, doesn't practically every one of the accounts of the Company contain a provision, a subdivision for miscellaneous costs?

A. In the case of pipe lines they do have miscellaneous costs, and that includes miscellaneous small materials and
5179 supplies consumed during construction, and board, and doctors' bills, and stamps, and things like that.

Q. How about field lines; does that account also have a miscellaneous sub-account?

A. Yes; pipe lines are field lines.

Q. How about compressor stations?

A. Yes, I think the compressing stations have.

Q. How about field measuring and regulating station structures?

A. I don't recall about this account; I know some other accounts have it.

Q. All right, Mr. Antonelli, will you check that account and determine for us whether or not there is provision made in this account for miscellaneous costs?

A. Yes, sir. The structures are so small, you know, and I don't think they would have miscellaneous costs for this account.

Q. Well, you will check and find out and report to us?

A. Yes.

Q. Now you say you found a voucher covering 700 of these 1300 wood boxes, is that right?

A. Yes, sir; I found several vouchers. One of the vouchers was for 689 meter boxes. The voucher was L-92, 1919.

Q. And you used the cost as developed from that voucher for the bulk of the 1386 boxes?

5180 A. Well, this voucher covers the construction and installation of part of these 1300 boxes, yes.

Q. Now first off, where was that expense charged to in the first instance, do you know?

A. I think it was charged to operation.

Q. That voucher covering some 680-odd boxes?

A. Yes, sir.

Q. When were these 1300 boxes constructed, do you know?

A. They were constructed at about the period of this voucher. I will explain that. The company will build these boxes and keep them at the warehouses and use them as they need them. They are small boxes, and usually they do this work when they are not very busy, in the summer, and they store them and then use them later. So that is why they all happen to be in 1919. I assume that that is the answer, or I am positive that that is the answer.

Q. You are positive that is the answer with respect to the entire 1300, is that right?

A. No; there were some other vouchers that show some other boxes installed in different years. This was the large one.

Q. Can you tell us when the balance of those boxes was constructed?

A. I could probably tell you about 50 more, the actual cost for approximately 50 other boxes.

5181 Q. When were those constructed?

A. Various years, 1920 and 1923 ——

Q. (Interposing.) Were those all expensed?

A. Yes, sir; they were.

Q. All vouchers that you found in connection with these boxes had been charged to operating expense, the costs had been charged to operating expense?

A. Yes, sir.

Q. Now with respect to the houses, the 122 houses, do you know how those were charged, that is, the costs in connection therewith?

A. They were charged to operation.

Q. Now going back to another matter, Mr. Antonelli, can you tell us now whether or not it is a fact that your Company, the Hope Company, has always been required to show the cost of its property in its capital account?

A. No, sir; I cannot. I don't know what were the Company's policies, and I wasn't interested in finding out.

Q. Now how long have you been in this business of valuing public utility properties?

A. Any public utility property?

Q. Yes.

A. Since 1919.

Q. And in the course of that time, have you familiarized yourself with the Systems of Accounts under which the utilities
5182 which you were valuing were required to operate?

A. I investigated the books in order to get the costs, yes. I know something about——

Q. (Interposing.) You know something about the Systems of Accounts?

A. Yes.

Q. Now do you know something about the System of Accounts under which the Hope Company operated in West Virginia prior to the present System of Accounts, the prior system being in evidence here as Exhibit No. 12, I believe?

A. Yes, sir.

Q. And do you also know something about the System of Accounts of the West Virginia Commission under which the Hope Company was required to operate from 1923 to 1931?

A. Yes, sir.

Q. You do?

A. Yes, sir.

Q. Do you know whether, under those Systems of Accounts, the Hope Company was required to show in its fixed capital accounts the cost of its properties?

A. Yes, I do.

Q. And it is a fact, is it not, that under the Systems of Accounts under which the Hope Company was operating, from 1923 on, at least, of the West Virginia Commission, it has always been
5183 required to show in its fixed capital accounts the cost of its properties?

Mr. MILDE. I object to that. The accounts are in evidence, and it is not a question of fact, it is a matter of interpretation of the accounts.

Mr. SLAFF. I don't know what interpretation there is.

Mr. MILDE. Also, it is not proper cross-examination of Mr. Antonelli.

TRIAL EXAMINER. Well, so far as the existence of the facts are concerned, I think they are entirely clear from the evidence. If the purpose is to test the knowledge and reliability of the witness, that is something else.

Mr. MILDE. Well, as I understand it, that isn't the purpose of the question. Mr. Antonelli hasn't been testifying as to the interpretation of Codes of Accounts. He has testified that it hasn't been necessary for his original cost determination.

Mr. Slaff might as well interrogate Mr. Antonelli about his qualifications on the Ohio Code of Accounts, or something else, if he just wants to know how much he knows about accounting. It certainly has nothing to do with what he did, nor does it test his reliability or credibility as a witness on the subject for which he was presented.

TRIAL EXAMINER. Well, it doesn't seem to me that it is of great importance, anyway, so far as that is concerned.

The objection is overruled.

5184 Mr. MILDE. Exception.

* * *

The WITNESS. I don't know what is required, but I could tell you what actually Hope did.

Br. Mr. SLAFF:

Q. I am asking you whether you know what they were required to do under the governing Systems of Accounts from at least 1923 on?

A. Well, I could tell you from this Code of Accounts what was required, yes. I have read this Code of Accounts, and I know what is required.

Q. And was the Company, the Hope Company, required to show, in its fixed capital accounts, the cost of its properties?

A. According to the Code of Accounts prescribed as of 1923, yes.

Q. You determined the cost of the Hope Company's properties from sources other than the fixed capital accounts of the Hope Company, is that correct?

A. I went back to the vouchers and records where the actual cost was recorded, because I found that the fixed capital did not reflect the actual or complete cost of these properties.

5185 Q. Well, is that the equivalent of saying, are you telling us, then, Mr. Antonelli, that the Hope Company—in your judgment, at least—did not keep its fixed capital accounts in the manner in which they were required to keep them under the controlling Systems of Accounts, from 1923 on?

A. I am not a judge of that, I am not experienced enough to say that. I don't know.

Q. Are you telling us that the fixed capital accounts of the Company did not show the cost of the Company's properties?

A. It showed some costs, but they didn't show the complete costs.

Q. All right.

Now have you testified earlier today, or yesterday, that you were not interested in the bookkeeping or the accounting practices of the Company, and that your job was to determine the original cost of the Hope properties?

A. Yes, sir; to determine the original cost of the Hope properties from the Hope records, vouchers, and so on.

Q. And it is your belief, is it, that that determination can be made regardless of the Company's accounting practices?

A. That is the only practical way that one could make original cost, at least that is my experience.

Q. And is it your statement that such a determination of cost can be made without regard to the accounting for the
5186 various transactions?

A. My experience wasn't as difficult as that. What I did was, as I said before, make a list of all of the items in the system; then go to the various records of the Company where the actual costs for these items were recorded; and that is all I did, all I had to do. It was just a tedious job finding the cost of each item.

Q. I should like at this time, Mr. Antonelli, to find out, if I can, from you what were the principles that underlay your determination—and I am asking you now whether it is your testimony that the costs of property can be determined without a consideration of how the transactions were accounted for in the first instance?

A. Well, I did take that into consideration in connection with the investigation of the vouchers and records of the Company. Naturally, the vouchers will show the transactions, and I read them very carefully to see what happened to the various items. But I confined myself to the individual items and what happened to each individual item, and not what was the practice of the Company or what the Company did on their books, or what-not, or what was the policy of the Company. I didn't care if the item was expensed or capitalized, or what-not.

My job was to find the actual cost, the amount of money that the Company paid for these properties.

5187 Q. Mr. Antonelli, is it not a fact that for two identical construction jobs, the costs may vary, depending upon the accounting procedures of the two companies which have constructed those identical jobs?

A. I don't understand the question; will you explain it?

Q. Surely. Let's put a case to you.

Let's consider a pole line construction—everything else is the same, of course, all other factors are the same—a construction by two companies. In each of the cases the company has taken 500 poles out of its storehouse; in each of the cases each of the companies had, let us say, 2,000 poles in its warehouse, not specifically identified; and the poles had been acquired by each of the companies in the following manner: 1,000 at $1 apiece, and the remaining 1,000 at $2 apiece. Do you follow me that far?

A. Yes; I follow you.

Q. Now suppose the first company accounts on the "first in-first out" method, and the second company accounts on the average cost method. What is the cost to the first company of the material in the pole line of the 500 poles, and what is the cost to the second company of the material in the pole line which they construct?

A. Well, I can't answer that question; it doesn't mean anything.

5188 Q. Mr. Antonelli, you were discussing "first in-first out" yesterday, weren't you?

A. Yes.

Q. That is the way you priced out the communications equipment inventory of this Company, wasn't it?

A. Yes; sir.

Q. You know what "first in-first out" means, don't you?

A. Yes.

Q. You know what "average" means?

A. Yes.

Q. All right. Now then, confining ourselves to the first company, under the hypothesis I have given you, what is the cost of those 500 poles in its pole line? That is the company that uses the "first in-first out" method of accounting.

A. Well, the cost would be that the company will use the most recent poles first, and will keep on using them until it exhausts all of its poles.

Q. What is the cost to the company of the 500 poles in its pole line under the "first in-first out" method of accounting?

A. Well, what was the cost, a dollar apiece?
Q. A dollar apiece.
A. It would be $500.
Q. Well, what is the cost of those identical 500 poles
5189 to the second company which accounts on the average?
A. That was a dollar apiece?
Q. The costs were identical.
A. It would be $500.
Q. On the average method?
A. Well, you have 500 poles——
Q. (Interposing.) Perhaps you don't understand the question, Mr. Antonelli.

The 2,000 poles were put into the warehouse and none of them were tagged. The first 1,000 that went into the warehouse cost $1 apiece, and the second 1,000 that went in cost $2 apiece. Now the first company accounts on the "first in-first out" method; the second company accounts on the average cost method.

Now will you tell us what the cost of those 500 poles in the pole line is, as far as the second company is concerned?

Mr. MILDE. I object to that question unless Mr. Slaff will state to the witness what he means by the word "cost." Does he mean the actual cost or the accounting cost?

Mr. SLAFF. Mr. Examiner, I am trying to find out from the witness what he means by "cost."

Mr. MILDE. No, he slips in this word "cost" without any statement to the witness as to whether he wants the actual cost or the accounting cost, or the cost——

Mr. SLAFF (interposing). This witness can qualify all over
the lot, and I have no objection to his qualifying his
5190 answer if he feels he can't answer it unqualified.

Mr. MILDE. The answer is inherent in Mr. Slaff's assumption. If he means actual cost, he said that all of these poles cost exactly the same thing to both companies. So obviously, by "cost," when he goes on to ask a question about it, he must mean something else besides actual cost.

You say to a witness, "500 poles cost one company the same amount of money as they do the other company; now what does it cost Company A and what does it cost Company B?"

Now the word "cost" the second time isn't used in the same way. I think the witness is entitled to a statement by the cross-examiner as to what "cost" he wants him to figure out.

Mr. SLAFF. This witness has used allocated cost; he has used cost; he has used estimated cost; he has used first in-first out cost. He knows what costs are—maybe.

TRIAL EXAMINER. This witness is an expert in determining costs, and he is being asked now how he would make that determination and what his determination would be.

Mr. MILDE. I thought he was being asked what the cost was as meant by Mr. Slaff, because he starts out with the premise that these things cost the same amount. So when he says——

Mr. SLAFF (interposing). I say that the first 1,000 poles
5191 cost each of the companies a dollar apiece, and the second 1,000 that went into the warehouse cost each of the companies $2 apiece.

Mr. MILDE. So it is perfectly apparent that all these poles cost Company A and Company B exactly the same amount of money.

Mr. SLAFF. Mr. Antonelli, do you understand now what Mr. Milde wants you to testify to?

The WITNESS. No, sir; I don't.

By Mr. SLAFF:

Q. Maybe you understand my question?

A. No; I don't understand your question. It is so mixed up.

Q. Let's start from the beginning; let's get the assumption straight.

TRIAL EXAMINER. Well, you understand the assumptions, don't you?

The WITNESS. Not quite; I want to make sure what he has in mind.

TRIAL EXAMINER. Start over, then.

By Mr. SLAFF:

Q. Each one of the companies buys the first 1,000 poles at a dollar apiece. That is clear, isn't it?

A. Yes.

Q. They each buy the second 1,000 poles at $2 apiece—right?

5192 A. Yes.

Q. In each case the 2,000 poles are in the warehouse, unidentified, untagged. The first company accounts on the "first in-first out" method; the second company accounts on the average cost method. Each one of these companies constructs a 500-pole run. Now what is the cost to the first company of the 500 poles in that pole line which it has constructed?

A. Well, that is not the way we did it, but I will answer your question. For one company it will be $1.50 per pole, and for the other it will be $2 per pole.

Q. You are a little off aren't you, Mr. Antonelli?

A. Then I don't understand your question.

Q. "First in-first out," what does that mean to you?

A. On the "first in-first out" theory, you exhaust the latest costs or the latest poles, and then you go back to the first ones.

Q. Aren't you thinking of "last in-first out," Mr. Antonelli?

A. That is right. No, "first in-first out." We took out the oldest poles and we retired the oldest poles first, and we assume that the poles that are in there now are the latest poles.

Q. What poles would go out of the warehouse first on the "first in-first out" method, Mr. Antonelli?

5193 A. The oldest poles will go out first.

Q. Go out of the warehouse?

A. The latest poles will go out of the warehouse, the oldest poles will go out from the inventory.

Q. We haven't had any poles in the field and in our inventory, we have just got 2,000 poles in each of the warehouses.

A. Yes.

5194 Q. Now, under the "first in—first out" method, which poles would go out first, the oldest ones?

A. That is not what I did at all. I don't know which poles would go out under the "first in—first out" method.

TRIAL EXAMINER. You mean which ones would be charged off the books, don't you?

Mr. SLAFF. Certainly.

TRIAL EXAMINER. He is talking about taking the poles physically out of the warehouse and I assume the first ones they would take out are the last ones they put on the pile.

By M. SLAFF:

Q. Let's get back to the same language. Can you tell us now what is the cost of the 500 poles in the pole line under the "first in—first out" method of accounting for cost?

A. In the warehouse or in the inventory?

Q. In the pole line that has been constructed.

A. I am sorry, but I don't understand your question. I want to make sure now. We were talking about warehouses and now you are talking about the line. What are you talking about?

Q. Mr. Antonelli, do you mean now that you don't understand what the question was that was put to you?

A. No, sir.

Q. Do you want to start all over again, from the be-
5195 ginning?

A. Yes.

Q. Will you just listen reasonably carefully then? You do understand the underlying assumptions that each of the two companies bought a thousand poles at $1 apiece, put them into the warehouse; and each of the companies then bought another thousand poles at $2 apiece and put them in the warehouse.

Then, each of the companies withdrew 500 untagged poles from the warehouse and constructed a pole line. Is that all clear to you, up to that point?

A. Yes, sir.

Q. Now, then, what is the cost of the pole line to the first company which counts on the "first in—first out" basis?

TRIAL EXAMINER. You are called on in each case to determine the cost of those poles.

The WITNESS. Well, they are untagged, those poles?

By Mr. SLAFF:

Q. Completely untagged.

A. They won't know which are the dollar poles and which are the $2 poles, and they are all mixed up together. Therefore, they will have to use the average price.

Q. Well, my assumption, Mr. Antonelli, is that the first company does not use the average price but uses the "first in—first out" method of pricing.

5196 A. That assumption is wrong because if the poles are untagged, the company does not know which are the dollar poles and which are the $2 poles.

Q. Mr. Antonelli, don't you know that it is a thoroughly sound, accepted method of accounting to account "first in—first out" where items in a warehouse are unidentifiable?

A. No, sir.

TRIAL EXAMINER. Isn't that what you did?

The WITNESS. No; I did that in the case of the inventory. I was talking about the inventory, Mr. Examiner, and not about the warehouse.

By Mr. SLAFF:

Q. Well, Mr. Antonelli, are you intent now on demonstrating that you don't know anything about accounting; is that it?

A. No, I don't say that; no, sir.

* * *

5572 PETER ANTONELLI, having been previously sworn, took the stand and testified further as follows:

Cross-examination by Mr. SLAFF:

Q. Mr. Antonelli, you will recollect that towards the conclusion of your examination on Tuesday we were discuss-
5573 ing an illustration which I had put to you with respect to cost of identical property to two different companies. Do you have the facts of that illustration in mind?

A. Yes, sir; I do. I am sorry I misunderstood you. I thought you were talking about communication equipment.

Q. No; you understand that was purely an illustration I was giving?

A. Yes.

Q. And with respect to that I had asked you to tell me what the cost of the poles in the pole line of the first company which are accounted on a first-in, first-out basis was. Can you tell me that now?

A. As far as the actual cost is concerned, the cost to the "A" company is the same as the cost to the "B" company.

Q. No, I am not asking for a comparison. I am asking you in dollars now. Let us take "A" company which accounts on a first-in and first-out basis and "B" company as the company which accounts on an average basis. Now, will you tell me what is the cost in dollars of the poles in the pole line of company "A"?

A. From a bookkeeping point of view?

Q. What is the cost?

A. Well, what, do you mean, actual cost or bookkeeping cost?

Q. What is the actual cost in dollars of the poles in
5574 the pole line of company "A"?

A. Well, I will have to estimate it.

Q. Well, now will you tell me, why, first off, you have to estimate it on the basis of the facts which I have given you?

A. Well, on the basis of the facts which you have given me, which is not the actual cost but just an accounting cost, the cost of that particular line would be $500.

Q. Now, you say that that is not the actual cost. Is that correct?

A. That is correct; yes.

Q. Now, will you tell me why that is not the actual cost?

A. Because the company spent $3,000 for the poles that they purchased.

Q. No; there is no necessity at this time, I believe, Mr. Antonelli, to bring in company business. We will make the comparison, you needn't worry about that, we will get around to the problem of comparing the two companies, but confine yourself, please, now to company "A" and tell me why the actual cost of those 500 poles is not $500?

A. Because the company selected to take out of the $3,000 five hundred poles at a dollar price, which is not the actual price of these 500 poles. They just chose to use a dollar a pole,
5575 they could have used just as well $1.50 or $2.00 but they choose to use $1.00 a pole.

Q. Then you mean to tell me, that a company which accounts on a first-in, first-out basis for such materials coming from its storehouse does not by that method show its actual costs on its books?

A. The company will show the actual cost on the books at the time they exhaust the 3,000 poles.

Q. Well, we are not at that time yet, Mr. Antonelli, we are still at the 500 poles in the pole line.

A. No; they don't show the actual cost of these 500 poles, no, sir.

Q. That would apply equally, would it, to company "C" which is a new company we are going to bring in now which accounts on a last-in, first-out basis? Under your approach, if that company accounted for 500 poles, all other conditions being the same as those you have been discussing, on a last-in, first-out basis, its books would not show the actual cost of its property? Is that correct?

A. No, sir; that is just a bookkeeping method of keeping the books.

Q. So that it is your position, isn't it, that the only actual costs which exist in such a situation are average costs? Is that correct?

A. I think it is about the best method that you could
5576 use——

Q. (Interposing.) No, I am not interested in what you think is the best method, Mr. Antonelli, at this point. I am asking you whether it is your position that the only actual costs in such a situation are the average costs.

Mr. MILDE. Well, I object to that question, he has just answered it.

Mr. SLAFF. No, he definitely skidded away from answering it, that is why I repeated it.

The WITNESS. Well, as far as I am concerned personally, I think the average gives you about the best results.

By Mr. SLAFF:

Q. That is apparent as I understand your testimony, Mr. Antonelli, but I am asking you if it is also your position that that average cost is the only actual cost?

A. Inasmuch as the poles were not tagged, they were all mixed up and you spent $3,000 for the poles, I think the average is the best method to take the poles out of the warehouse.

Q. Mr. Antonelli, confining yourself to the 500 poles in the pole line, will you tell us whether it is your position that the only actual cost of those poles is the average cost?

A. The actual pole cost is the $3,000, now if the company is going to take them out and what they want to do with it,
5577 of course, is a problem of accounting policy.

Q. Perhaps you don't—do you realize we are confining ourselves to the 500 poles in the pole line?

A. Well, in the case of the 500 poles I think, as far as I know now, the only method would be the average cost.

Q. And I am not sure that your answer is quite complete. Do you mean, Mr. Antonelli, that the only actual cost of those poles is the average cost?

A. Under the circumstances I say yes.

Q. So that in the illustration that we have been discussing a company which accounts on a first-in, first-out basis or accounts on a last-in, first-out basis does not state its actual costs on its book. Is that correct?

* * *

5579 The WITNESS. I don't know in this case what the answer would be, but, as I said before, that wasn't the way I derived my original cost.

By Mr. SLAFF:

Q. That is thoroughly patent, Mr. Antonelli, and I think yo have explained several times how you derived your original cos and what we are doing now is trying to test the validity of you determination.

Now, we know that isn't the way you did it. Now, then, can yo tell us, directly, Mr. Antonelli, whether in this situation in you view a company which accounts in this type of situation on th first-in, first-out method or on the last-in, first-out method is o is not stating on its books the actual cost of its property?

A. I don't know, I can't tell you because in that thing I did I didn't have any occasion to use that kind of a method. I had th actual cost.

Q. You had occasion to determine actual cost, did you not?

A. Yes, sir.

5580 Q. As you conceived it?

A. Yes; I did.

Q. And you had, then, to determine what was actual cost o if there was actual cost or if there was more than one way o stating actual cost, is that right?

A. Yes; I tried to determine the actual cost from the company records to the best of my ability, yes.

Q. And you had to determine in your own mind whether there was simply one way of stating actual cost or more than one way o stating actual cost. Isn't that correct?

A. Well, my actual cost was a matter of fact. I did find it in the company records, it was recorded, it shows that the company paid so much for certain items.

Q. Now, Mr. Antonelli, will you please answer my question? You had to determine in your own mind whether there was just one way of determining actual cost or more than one way of determining actual cost, isn't that right?

A. Yes.

Q. And you came to the conclusion, as I understand it, that there was only one way of determining actual cost?

A. Yes.

Q. Now then, in the illustration which we have been discussing. will you tell us whether in your view the company which accounted

for the 500 poles we have been discussing on the first-in, first-

5581 out basis or the company which accounted on the last-in, first-out method would or would not be stating its actual cost of those poles on its books?

A. From the standpoint of actual cost, both of the methods are wrong and if I had a case like that I would try to remedy it to get the actual cost by going back and finding and trying to determine what was the actual cost. If I couldn't have gotten it, I would have tried to estimate it. I wouldn't use the first method or the last method.

Q. And is it your view, then, if you can answer the question specifically and directly, that the company which accounts on the first-in, first-out method and the company which accounts on the last-in, first-out method are not stating on their books the actual cost of that property?

* * *

5582 The WITNESS. My answer is no, they are not, in this illustration.

* * *

5583 By Mr. SLAFF:

Q. Mr. Antonelli, we were discussing, before lunch, an illustration which I had put to you in connection with your statements respecting the ascertainment of actual cost and what is actual cost, and so on, and I should like to continue along that line with a somewhat different problem for you.

Using our three companies, A, B, and C, will you assume the following: that identical properties are about to be constructed in the illustration; that utility A capitalizes interest during construction only on jobs which take 30 days or more and which cost $5,000 or more; that utility B capitalizes interest during construction only on jobs which take 30 days or more and which cost $2,000 or more, and that utility C capitalizes interest during
5584 construction only on jobs which take 60 days or longer, and cost $4,000 or more.

Now, before going into the questions that I want to develop in that specific example, I would like to ask you whether there is anything unusual in the type of situations which I have given you?

A. No, sir.

Q. In other words, those are normal accounting practices within the natural gas industry?

Mr. MILDE. I object, unless he qualifies this witness to testify as to normal accounting practices in the natural gas industry. He hasn't been presented as an accountant.

Mr. SLAFF. You qualified him on that specific matter, in his Exhibit 20, when he specifically spoke of how he had used interest during construction in this case. Not finding specific records on the company's books, he assumed, as I recollect, interest during construction on jobs of 30 days or more and costing $5,000 or more.

Of course, if he wasn't qualified to make that assumption, then I move to strike all his direct testimony in that respect.

Mr. MILDE. That wasn't the question you asked him. You asked him as to general accounting practices in the natural gas industry. If you want to qualify him as to his experience and knowledge of the general accounting practices in the natural gas industry that is up to you, but that isn't a part of his direct testimony.

5585 By Mr. SLAFF:

Q. Mr. Antonelli, do you know anything about accounting practices in the natural gas industry?

A. No, sir.

Q. Do you mean to tell me you testified here on orignial cost without knowing anything about accounting practices in the natural gas industry? Is that what you are telling us?

A. I determined the original cost of this property.

Mr. SLAFF. Mr. Examiner, may we have the witness instructed to answer this question?

* * *

TRIAL EXAMINER. You may answer the question.

The WITNESS. I say that I do not know about the accounting practices of the gas industry. I did not have to know the accounting practices of the gas industry because my job was to determine the original cost from the company's records, and I went to these records and got the original cost of each item; and the accounting practices were not involved or did not concern me at all.

5586 By Mr. SLAFF:

Q. Didn't you testify that you followed the accounting principles in the Federal Power Commission system of accounts and the West Virginia system of accounts?

A. Yes, sir; as much as possible, and as I said before that was in connection with classifying the properties in accordance with the new code of accounts.

Q. And do you mean to tell us, Mr. Antonelli ——

* * *

The WITNESS. And I did that, I set up all the properties and classified the properties, using these new accounts and including in each account what was said in the code of accounts; yes, sir.

By Mr. SLAFF:

Q. Mr. Antonelli, are you telling us now that you claim to have followed the accounting principles as laid down in those two systems of accounts, without knowing anything about the accounting practices in the natural gas industry?

A. Well, what do you mean by "accounting practices"?

Q. You told us a few minutes ago that you didn't know anything about the accounting practices in the natural gas industry. What did you mean when you said that?

A. By that I meant whatever the policies were of the
5587 various companies. Each company might have a different policy and a different way of setting up their books.

Q. You didn't go into the specific policies of each company, is that right?

A. Well, I am referring to the Hope Company.

Q. Well, do you know anything about general accounting practices in the natural gas industry?

A. I didn't have to know.

Q. Well, do you, or don't you?

Trial EXAMINER. Please answer the question.

The WITNESS. No, sir; I don't know.

By Mr. SLAFF:

Q. And we can rely on that last answer of yours, Mr. Antonelli, in evaluating your testimony in this case, can we?

A. Well, my testimony——

Q. (Interposing.) No, no—will you answer this question which I have just put to you? Can we rely on this last answer of yours as being a true and correct answer in evaluating your testimony in this case?

Mr. MILDE. I object to that type of question.

Mr. SLAFF. There is nothing objectionable about it.

Mr. MILDE. Who is "we," and what do you mean by "evaluating"?

Trial EXAMINER. The objection is overruled.

The WITNESS. Will you read the question, please?

5588 (The question was read by the reporter.)

Mr. MILDE. I wonder if it wouldn't be fairer to the witness to hear the preceding question and answer?

Mr. SLAFF. By all means.

Trial EXAMINER. Read the preceding question and answer.

(The reporter read—Line 6 to Line 14, inclusive, page 5387—as follows:)

"Q. Well, do you know anything about general accounting practices in the natural gas industry?

"A. I didn't have to know.

"Q. Well, do you, or don't you?

"Trial EXAMINER. Please answer the question.

"The WITNESS. No, sir, I don't.

By Mr. SLAFF:

"Q. And we can rely on that last answer of yours, Mr. Antonelli, in evaluating your testimony in this case, can we?"

The WITNESS. I again say that I did not have to know—

By Mr. SLAFF:

Q. (Interposing.) Mr. Antonelli, will you please listen to the question and will you please try to answer the question which I have put to you?

Mr. SLAFF. Will you read it again?

(The following was read by the reporter:)

"Q. And we can rely on that last answer of yours,
5589 Mr. Antonelli, in evaluating your testimony in the case, can we?"

The WITNESS. I can't answer that question. I don't know how you want to rely on it.

By Mr. SLAFF:

Q. I will tell you what I mean. Can we accept that last answer as a true and correct answer on your part in evaluating your oral testimony?

A. My answer was that it wasn't necessary for me to know the accounting practices ——.

Trial EXAMINER (Interposing). That doesn't answer the question, Mr. Antonelli.

Mr. MILDE. Well, it is a perfectly unfair question because it assumes that this witness doesn't tell the truth every time he answers a question—and he does.

Mr. SLAFF. No; I want him, just as you have pointed out, to realize fully what the last question was and the answer that he

made, and on that basis I want him to tell us whether we can rely on that in evaluating his testimony as a true and correct response.

Mr. MILDE. Well, that is no way to ask a witness a question or to arrive at the result that Mr. Slaff wants to reach—"Can we rely on it?" That is perfectly unintelligible. If he wants to say to the witness: "Well, now, do you understand fully
5590 that last question and is your answer a full and complete answer, and do you understand what you are saying?", that is all right, but when he says, "Can we rely in evaluating"—that is perfectly meaningless to any witness, who isn't a lawyer, I would say.

Trial EXAMINER. All right, let's see. Do you understand the question, Mr. Antonelli?

The WITNESS. Yes; I do.

Mr. MILDE. Well, then, answer it.

Trial EXAMINER. It seems to be meaningful to him.

The WITNESS. Well, I don't know how to answer it, Mr. Examiner.

Trial EXAMINER. Well, it seems to me that if you understand what the question means it shouldn't be difficult to answer.

The WITNESS. But, as I said before, it wasn't necessary for me to know anything about ——

Trial EXAMINER (Interposing). We understand your position in that respect all right; that is entirely clear.

The WITNESS. Well, with the qualification that it wasn't necessary for me to know the policies and accounting practices of the company, I will say "Yes."

By Mr. SLAFF:

Q. All right. You do know something about interest during construction, don't you?

A. Well, I applied these interests to these various costs.

5591 Q. And you do know, or purport to know, something about actual costs, too; that is correct?

A. Yes, sir.

Q. All right. Now, you have before you the assumptions I have given you with respect to these three utility companies, do you?

A. Yes, sir.

Q. Now, will you assume also that the cost of money to all companies is the same, 6 percent per annum?

A. Yes.

Q. Now, let us assume that an identical construction job is done by you for the companies, and the job lasts 60 days and costs $2,500. Now, will you tell us what is the cost of that job to each of the three companies?

Mr. MILDE. Well, again, I object to that question unless we have the cross-examiner state what type of cost he means.

Mr. SLAFF. Why, Antonelli's actual costs.

The WITNESS. The job costs, you say, $2,500?

By Mr. SLAFF:

Q. Yes, $2,500.

A. And you want to find the interest?

Q. No, no; that is inclusive of all costs other than interest, if any. Now, I want you to tell me the actual cost of that job to Utility A, to Utility B and to Utility C?

A. Let me see now if I understand your problem. On
5592 A Company the interest was 30 days, capitalized 30 days, and the amount should be $500 or over?

Q. $5,000 or over.

A. Yes, sir. The second one was 30 days and the amount was $2,000 or over?

Q. That is right.

A. And third was 60 days, and the amount was $4,000 or over?

Q. That is right.

A. And the problem was that you had a two months' period now?

Q. Yes, at a cost of $2,500.

A. On the first one, inasmuch as the amount is less than the $5,000, there will be no interested included.

Q. So the cost would be $2,500?

A. $2,500.

Q. The actual cost of that construction?

A. That is, under your assumption.

Q. That is right. Now, how about the second one?

A. The second one—it is 30 days and you allowed me $2,000 or over. Therefore, for the first $2,000 you don't have to pay interest, and you are going to pay interest for the $500, and the interest you pay on the $500, you pay—I assume under your
5593 illustration—for a month, and it would be $25 extra, making the amount $2,025. That is the assumption that you make. On the third case, you have 60 days and $4,000. There-

fore, you pay interest on the $2,000. On the last company, you don't pay any interest at all.

Q. Well, I think we are in agreement, Mr. Antonelli, as to your answer and your method with respect to Utilities A and C, the first and the last, so let's just review that. With respect to those two, the actual cost of that job is $2,500; is that correct?

A. Yes.

Q. Now, let's go to Utility B. Before putting that question, let me put this question to you: When you, in your original cost study, capitalized interest during construction on jobs costing $5,000 or more, and lasting 30 days or more, suppose a job costs $6,000 and lasted 60 days, what interest did you capitalize?

A. I assumed that the money will be—that we will have to have half of the interest— you don't need all the money at the beginning and we will need only half of it at any time. In other words, use 3 percent instead of 6 percent per annum.

Q. On the full amount?

A. On the full amount.

Q. Now, with respect to the company which I have designated as Utility B in the illustration which I have given
5594 you, will you tell us again what the actual cost of that job is, and how you arrived at it?

A. I was using your method, now.

Q. Using the assumptions that I gave you.

A. I said that I assumed that you told me to use 6 percent——

Q. (Interposing) Per annum?

A. Per annum.

Q. That is right.

A. And I just did that—I used half a percent per month. But in my case, in the original cost I used a quarter of a percent.

Q. I realize that. Will you tell us in this illustration I have given you, again, what is the actual cost of that job to Utility B?

A. It will be $2,000 plus one month's interest on the $500. Based on your assumption that would be $2,025; based on my assumption it would be $2,012.50.

Q. Well, in any event, Mr. Antonelli, is it true that in such a case you get a different actual cost for the same job for one utility than for another?

A. No, sir.

Q. Well, perhaps I misunderstood you, but did you tell us that the actual cost of the job for Utilities A and C was $2,500?

5595 A. Yes.

Q. Did you tell us, now, that the actual cost of the job for Utility B is either $2,525 or $2,512.50?

A. That is right, because——

Q. (Interposing.) All right——

Mr. MILDE (interposing). Let him finish.

Mr. SLAFF. Go ahead, if you want to expain it.

The WITNESS. No; that is all right.

By Mr. SLAFF:

Q. So, as I understand it, you do have one actual cost for the first utility and a different actual cost for the same job for the second utility; isn't that correct?

A. You are to B now?

Q. Surely.

A. Yes; but in one instance I assumed that the money was available, you had the money at the beginning to start the job and you had to pay interest right before you started the job; and on the other I assumed that the money was available as you needed it, and you didn't need to have all the money at the beginning or all at the end.

Q. Perhaps you don't understand me, Mr. Antonelli.

Confining ourselves now to a comparison of Utility A and Utility B, in one case you tell us the cost is $2,500, the actual cost, and in another case, using your method, $2,512.50, is that correct?

5596 A. Well, that was again an accounting practice of the company, and it was due to the way the company chose to do their work.

Q. Surely, and it was, in both cases, the actual cost of the property to the utility; was it not?

A. No; I wouldn't say that.

Q. Now, then, you want to change your answer, as I understand it, to the effect that one of those costs is not the actual cost to the utility involved; is that so?

A. Well, it all depends on what the company decides to do. They both might be actual costs, it all depends on what the company did actually spend.

Q. I have told you, Mr. Antonelli, just exactly what the company spent and what the company in each case decided to do.

* * *

5597 Q. All of the conditions, Mr. Antonelli, are the same,
5598 except as I have told you and as I originally told you, the decision of each of the companies as to the type of job on

which they will capitalize interest during construction. Now, with that in mind, do you want to change any of your previous answers as to what was the actual cost to any of the companies involved?

A. I still say the actual cost was what actually the company's decision was to handle this matter and how they spent.

Q. Now, then, tell us in dollars what was the actual cost of the property to Utility A?

A. Well, under the method chosen by the company, it will be $2,000.

Q. $2,500, you mean?

A. $2,500, yes, but of course that was just the bookkeeping method that the company chose to follow.

Q. Well, is that, or is that not, in your judgment, the actual cost of that property to that company?

A. That is the cost that the company will show on its books.

Q. Is it, or is it not, the actual cost of that property, Mr. Antonelli?

A. Well, somebody must have paid some more money for the interest, or somebody lost the interest. So I would say that it isn't the actual cost.

5599 Q. It is not?

A. No; it is not the actual cost.

Q. Now, then, with respect to the second company, what is the actual cost?

A. The actual cost will be, under the assumption, providing the company secured the money at—say it had to have only part of the money to start with and part of the money during the construction, the actual cost will be $2,500 plus the interest of $12.50 or $25.

Q. And if I understand in your last answer before this one, you then did not determine the actual cost of the Hope Company property; is that correct?

A. Yes; I did.

Q. Was there any cost on jobs of less than $5,000 and less than 30 days of construction time for interest?

A. No; but the reason for that was because the jobs were so small——

Q. (Interposing.) Was there or was there not?

Mr. MILDE. Let him continue his answer.

The WITNESS. And we didn't feel that the amount involved would warrant the time it would take to calculate this interest.

By Mr. SLAFF:

Q. Well, regardless of your emotions in the matter, Mr. Antonelli, were there or were there not costs for interest during construction of the Hope property on jobs of less
5600 than $5,000?

A. No, sir; there were not, and I would like to qualify my statement and tell you why.

Q. Well, let me understand. You are telling us that those costs did not exist; is that right?

A. The costs did exist but we didn't bother showing them.

Q. I realize that you didn't show them, but I am asking you whether or not the costs for interest did exist on jobs that cost less than $5,000 to Hope?

Mr. MILDE. I object; he has just answered that question.

Mr. SLAFF. He started to answer it.

TRIAL EXAMINER. If I understood it right, he didn't answer it as he intended to.

Mr. MILDE. Maybe not.

TRIAL EXAMINER. If I am not mistaken, he has two answers to the question already.

Mr. SLAFF. The answer has been both ways now, and I would like to have a majority opinion from the witness.

Mr. MILDE. I don't think it has been answered both ways.

Mr. SLAFF. Well, suppose you tell us whether or not on jobs that cost less than $5,000 in the Hope system there was a cost for interest incurred by Hope?

5601 The WITNESS. We are referring now to my original cost?

By Mr. SLAFF:

Q. No; was there in the history of the Hope Company, on jobs that cost less than $5,000, a cost to Hope for interest?

A. There must have been; somebody furnished the money.

Q. All right. And your exhibit does not show that; is that correct?

A. Yes, sir; and I explained why.

5602 Q. That is right. So that, to that extent at least, your exhibit does not show, in your own eyes, the actual cost of the Hope properties; isn't that correct?

A. Well, we did that on account——

Q. (Interposing.) No, no; is it or is it not correct, Mr. Antonelli?

The WITNESS. Read the question, please.

(The question was read.)

The WITNESS. It does not show the interest for properties constructed taking less than one month or costing less than $5,000.

By Mr. SLAFF:

Q. Mr. Antonelli, you told me in the hypothetical case I gave you that $2,500 was not the actual cost of the property constructed to Utility A, did you not?

A. Yes.

Q. Now I am asking you——

A. (Interposing.) That was a hypothetical question you were asking.

Q. Why, of course.

A. All right.

Q. And I am asking you if, on the basis on which you answered that question, it is not a fact that your Exhibit in this case does not show the actual cost of the Hope 5603 Company properties?

A. I say that it does show the actual cost of the Hope Company properties, and the only reason that we did not show the interest on properties constructed, in less than 30 days and costing less than $5,000 was from a practical standpoint it would have taken a great deal of time to determine that amount and to calculate it. It didn't amount to very much. That is why we left it out. It is just a conservative answer.

Q. So that your determination of actual cost of the Hope Company properties depended, to this extent at least, on the choice which you made with respect to a matter of accounting discretion, did it not?

A. No, sir; no accounting discretion came into the picture.

Q. Tell me this. Was it a matter of accounting discretion as to whether you would take jobs costing $5,000 and taking 30 days or more to construct, or jobs costing $6,000 or $7,500, and taking the same time to construct?

A. Well, I confined myself to the $5,000 jobs, because I thought that would give about the best results.

Q. Wasn't that a matter of discretion as to which amount you would take, and what period you would take as a basis for capitalizing interest during construction?

A. I didn't capitalize any interst during construction, I just determined the original cost and could have used——

5604 Mr. SLAFF (Interposing). Mr. Examiner——

Mr. MILDE (Interposing). Let him continue.

Mr. SLAFF. Go ahead.

The WITNESS. I could have started with a dollar and I could have started with something else, but in my estimation I thought that $5,000 and the one-month period were about the best basis to use.

By Mr. SLAFF:

Q. And that was a matter of choice with you, of discretion with you, was it not?

A. A matter of judgment; yes.

Q. And that matter of judgment involved a matter of essentially accounting judgment, how the transaction should be accounted for, did it not?

A. No, sir.

Q. Is the computation of interest during construction in the utility industry an accounting matter, Mr. Antonelli?

A. I don't know.

Q. Do you know anything about the operation of natural gas companies, Mr. Antonelli?

A. No; I am an engineer; no, I don't, as to the operations. I don't know just exactly what you mean by "operations." Let me get that straight.

Q. Do you know anything at all about the office operations of a natural gas company?

5605 A. Well, I have been around them.

Q. I mean, besides going through and saying "hello" to the boys?

A. I worked right in the company's offices; yes, sir.

Q. Now don't you know that the determination of the amounts to be charged as interest during construction in the routine operation of a natural gas company is a matter of accounting judgment?

A. Well, it might be, but that is not the way I did it.

Q. I think we are entirely convinced, Mr. Antonelli, that that is not the way you did it.

* * *

5606 By Mr. SLAFF:

Q. Now then, Mr. Antonelli, don't you know that it is a matter of accounting judgment or discretion to determine what

basis shall be used for the capitalizing of interest during construction?

A. Companies do that, I don't deny, but in this case——

Q. (Interposing.) You don't do it, we know.

A. I followed my judgment.

Q. We know that. Well, go ahead, have you got something more to add?

A. And we used this $5,000 and 30 days and 6 percent, after a study as to interest rates on the construction done by Hope.

Q. So that it is a fact, Mr. Antonelli, is it, that your determination of original cost, in this respect, at least, depended upon the discretion which you exercised with respect to an accounting matter? Now that is so, isn't it?

A. No, sir.

Q. You did exercise a discretion with respect to the basis for capitalizing interest during construction, did you not?

A. I just found the additional——

5607 Q. (Interposing.) No, no, ——

A. (Interposing.) I didn't capitalize anything, Mr. Slaff. I determined the original cost, and the company did spend some money for interest, and in order to get the actual cost I did my best and added to the original cost the amount of money that was necessary for interest. That was an estimated figure.

Q. Now, Mr. Antonelli, are you telling us that in your determination of original cost, you did not capitalize interest during construction?

A. I didn't capitalize anything, I didn't do a bookkeeping job; I determined the original cost of these properties. I didn't say that the amounts were capitalized or expensed or what-not, I determined the original cost.

Q. Did you capitalize anything in your determination of original cost?

A. No, sir; I found how much this property cost as of December 31, 1938, to the Hope Company in the case of the property constructed by Hope, and its original cost in the case of property constructed by other utilities. That is all I did.

Q. All right. As the basis for determining how much should be included therein for interest during construction, you did use your discretion, did you not?

5608 A. Yes; after a long study; yes, sir.

Q. And you have told us, have you not, that the basis of determining what amounts shall be added for interest during

construction, in the operations of a natural gas company, i
an accounting matter; isn't that correct, and isn't that wha
you have told us?

A. As I said before——

Q. (Interposing.) No; isn't that correct?

A. I don't know if it is an accounting matter or whatnot;
wasn't interested in that.

Q. Now then, are you telling us now that you don't know
whether it is an accounting matter, in the operations of a natura
gas company, to determine the basis upon which interest during
construction shall be added to other costs?

Mr. MILDE. May I have that question read, please?

(The question was read.)

The WITNESS. Maybe it is, maybe it isn't.

By Mr. SLAFF:

Q. You don't know; are you telling us that you don't know
whether it is or not?

A. Well, maybe it is; yes.

Q. No, no, Mr. Antonelli. Do you or don't you know whether
it is?

* * *

5609 The WITNESS. I think it is an accounting matter.

By Mr. SLAFF:

Q. So then, Mr. Antonelli, isn't it a fair statement to say tha
in this respect, at least, your determination of that part of orig
inal cost depended upon your discretion with respect to a matte
that is an accounting matter in the normal operations of a natura
gas company; isn't that a fair statement, Mr. Antonelli?

A. It wasn't an accounting matter as far as deciding to use 6
percent; no, sir. In case I bought a house I have to pay 6 per
cent interest, that isn't an accounting matter with me.

Q. Well, I am referring to the fact that you used a specific
basis of 30 days and $5,000 or more.

A. Yes; that was engineering judgment. We do that ever
in other jobs; we do it in reproduction cost jobs.

Q. So then, you are telling us that in that particular respect
your original cost determination did not in any way depend upon
the exercise of your discretion with respect to a matter which is
an accounting matter in the normal operations of a natural gas
company?

* * *

5610 The WITNESS. I don't understand the question the way you have it there.

By Mr. SLAFF:

Q. What part of it don't you understand?

A. Will you break it up, please, into a couple of parts, and I may be able to answer it.

Q. It is a simple question; it is one question.

TRIAL EXAMINER. Read the question again, please?

Mr. MILDE. I challenge counsel to restate it

Mr. STAFF. I can restate it, but I don't choose to at this moment.

(The question was read by the reporter.)

The WITNESS. It is not clear to me.

By Mr. SLAFF:

Q. All right. Are you telling us, Mr. Antonelli, that in no way did your original cost determination depend upon the exercise of discretion with respect to accounting matters?

A. Yes, sir, I do; I did not pay any attention to accounting principles and practices of the Company.

Q. Now confining ourselves strictly to the amount of interest during construction included in your original cost determination, will you tell us whether, in that respect, the

5611 amount of interest during construction that was used depended in any way upon the exercise of your judgement, your discretion, with respect to a matter that is an accounting matter in the normal operations of a natural gas company?

Mr. MILDE. I object to that question. It is an inaccurate statement——

Mr. SLAFF (interposing). It is not supposed to be a statement; it is a question.

TRIAL EXAMINER. I don't understand it to be a statement of anything. Do you understand the question?

The WITNESS. Well, as I make it out, he is referring to this 6 percent that I am using; is it a matter of accounting principle?

TRIAL EXAMINER. The 6 percent?

The WITNESS. The interest that I used was a matter of accounting principle.

By Mr. SLAFF:

Q. As a matter of fact, as I have told you, Mr. Antonelli, I am referring more specifically to the basis, that is, the 30-day and $5,000 basis that you used. In the light of that statement of mine, can you answer the question?

A. Well, I still say that the 30 days and the judgment the way we calculate interest, was based on studies made and
5612 not on any accounting practices or principles.

Q. The 6 percent was based on studies, you mean?

A. The 6 percent, yes; and the time was a matter of convenience, for me to do it.

Q. That is, the 30 days and the $5,000 basis; that was a matter of convenience to you?

A. Yes.

Q. Now another engineer, equally competent to you, could have used another basis, could he not, as a matter of convenience; that is to say, let us say 45 days and $7,500; and be just as reasonable as you?

A. Yes, sir; he could have.

Q. Then he would have arrived at a different actual cost of the properties of the Hope Natural Gas Company, would he not, from the one you arrived at?

A. Yes; but this interest is not such a large amount, you know.

Q. Well, let's not worry about the size of the amount, Mr. Antonelli, at this moment.

* * *

The WITNESS. Well, I would like to say that this interest is not such a large amount that it will have any effect on the actual cost. After all, you know there were some estimates made
5613 in here, and to that extent maybe this actual cost is off a few dollars.

By Mr. SLAFF:

Q. Well, you realize, Mr. Antonelli, that we are discussing here the principles that underlay your determination? You understand that?

A. I do.

Q. Now it is a fact, then, that there is not merely one actual cost, in your own view, isn't that so?

A. There is only one actual cost. There couldn't be anything else but one actual cost.

Q. Well, then, at least you did not necessarily determine correctly that one actual cost, is that right?

A. I determined it as accurately as I could get it; yes.

Q. And another person, using the same methods but different discretion, and exercising his judgment in different ways on matters of discretion, could arrive at another statement of actual cost which might be equally reasonable with yours; is that correct?

A. Yes; and I would say that when we determined our actual cost, we stated the conditions under which we determined it. We said that in case of interest we allowed interest for properties $5,000 and over, and taking 30 days to construct.

Q. By the way, who made that determination; was that the engineers or the accountants?

5614 As far as each one of the component parts, what about the interest, who determined that 6 percent was the proper rate of interest to use?

A. Well, that was determined after a long study as to the various interest rates paid during the history of the company, and we found out that 6 percent was about the normal interest paid.

Q. Who made the study?

A. One of our men; I just couldn't recall now.

Q. Do you have any work papers on that study?

A. I will have to refer to my working papers and see.

Q. Will you report to us whether you do or do not have any such working papers?

A. Yes, sir.

TRIAL EXAMINER. That was an engineering study, you say?

The WITNESS. It was just a study. We analyzed the interest paid in the various years, and what was the normal interest paid for that type of work way back from 1900 up to date.

Mr. REEDER. Mr. Antonelli, just to refresh my recollection, didn't you tell me in chief——

Mr. MILDE (interposing). Is this cross-examination, Mr. Reeder?

Mr. REEDER. No; this is just to refresh my recollection. Mr. Antonelli, didn't you tell me in chief that you based

5615 your interest during construction, of 6 percent, simply on the legal rate of interest in West Virginia?

The WITNESS. I don't recall offhand, Mr. Reeder, but I believe that 6 percent is the legal rate of interest in West Virginia.

By Mr. SLAFF:

Q. Well, will you check, Mr. Antonelli, and come back and tell us whether a study was made on which you based this 6 percent, and if it was, whether you have any working papers or not, or whether it is not a fact that you testified that you based your 6 percent rate on the legal rate of interest in West Virginia?

A. Yes, sir.

Mr. MILDE. Well, I submit that the only thing he has to report on is whether or not he has his working papers. He has testified

that he made the study, and whatever he said in the record before is already in the record. So the only thing he has to report on is whether or not he has working papers on this study.

Mr. SLAFF. It is all right with me, but I am suggesting for Mr. Antonelli's convenience on the witness stand that he refresh his recollection as to whether he testified in that respect.

By Mr. SLAFF:

Q. Now we made inquiry of you the other day, Mr. An-
5616 tonelli as to whether Ford, Bacon & Davis had developed certain unit costs in the 1929 Hope valuation proceedings, and whether or not you used those unit costs in connection with your original costs estimates. Have you made such an investigation?

A. Ford, Bacon & Davis did develop unit costs in their valuation of the Hope properties as of 1929, but those costs were not used or performances were not used in connection with my determination of the original costs of Hope's properties.

Q. They were not used at all?

A. No, sir; they were not.

Q. For what purpose did Ford, Bacon & Davis make those determinations?

Mr. MILDE. I object. That has no relevancy to this case.

Mr. SLAFF. Well, he testified that Ford, Bacon & Davis developed certain unit costs or performances on the Hope properties.

Mr. MILDE. In 1929.

Mr. SLAFF. That is right. I want to find out for what purpose those were made, what was the basis for making them, and then I want to find out why he didn't use them here.

TRIAL EXAMINER. The objection is overruled.

Mr. MILDE. Note an exception.

The WITNESS. They were prepared for the purpose of
5617 determining the properties of the Hope Company as of that date.

By Mr. SLAFF:

Q. For determining the properties, you say?

A. The cost of the properties.

Q. And those were determinations based on the best knowledge and information and judgment of Ford, Bacon & Davis as of that time, of performance in construcing Hope properties; is that correct?

A. Yes, sir.

Q. And what did that study embrace?

A. What study?

Q. That Ford, Bacon & Davis made of performances on the Hope system?

A. Well, they just developed unit costs.

Q. Well, did they make a study of performances of labor in the Hope system?

A. Well, I can't answer that question, I didn't make that study then.

Q. Did you determine, Mr. Antonelli, at any time, in connection with this present study you have been making for the last several years, what Ford, Bacon & Davis did in that 1929 determination?

A. Other people worked on that job; I didn't.

Mr. SLAFF. Mr. Examiner, will you please instruct the witness to answer the question?

5618 TRIAL EXAMINER. Answer the question.

* * *

The WITNESS. Determination of what?

By Mr. SLAFF:

Q. O. K. Mr. Antonelli, you have testified that Ford, Bacon & Davis made certain labor performance determinations in connection with their 1929 valuation of the Hope property; is that right?

A. Are we referring now to structures?

Q. I am referring to anything in the Hope system.

A. As far as I can see, they did make studies, yes, sir; they must have made studies in order to price the properties as of that date, because that is the way we do our work.

Q. Now at any time in connection with your original cost study in this proceeding, up to this proceeding, did you investigate the records of your firm to determine what had been done by Ford, Bacon & Davis with respect to the determination of such performance units in the 1929 valuation?

A. No, sir; I didn't, but I believe that I applied the 1927 or 1929 unit costs that were developed by Ford, Bacon & Davis at those dates, to these three compressing stations that I used to equalize the Ford, Bacon & Davis performances with the actual Hope performances.

5619 Q. Mr. Antonelli, you told us on the witness stand the other day that the units of performance that you have used in connection with these three compressor stations to get your

ultimate performance in this case, came from records of Ford, Bacon & Davis covering a wide sweep of jobs, didn't you?

Mr. MILDE. I object, that wasn't his testimony.

The WITNESS. I never said anything like that.

By Mr. SLAFF:

Q. Didn't you emphasize, Mr. Antonelli, that the unit costs with which you compared these three compressor stations came from many jobs?

A. I said——

Q. (Interposing.) Did you or did you not?

A. I did not. I said it was based on studies made by Ford, Bacon & Davis.

Q. Of many jobs?

A. Yes, sir; based on their experience, I said.

5620 Q. And did you at any time, Mr. Antonelli, in that discussion of how you developed your labor performance rates in this case, tell us that you had added 25 per cent to performance rates developed by Ford, Bacon & Davis in connection with the Hope Natural Gas Company?

A. I said——

Q. (Interposing.) Did you or did you not tell us at any time in that testimony?

Mr. MILDE. Well, I object to that type of question.

Mr. SLAFF. It is a perfectly proper question.

Mr. MILDE. "Did you tell us at any time" upon cross-examination? Mr. Antonelli hasn't charge of the cross-examination.

Mr. SLAFF. And he hasn't answered in the cross-examination in my judgment truthfully in that respect, and I use that word advisedly.

TRIAL EXAMINER. Will you read the question?

(The question was read.)

TRIAL EXAMINER. Objection is overruled.

Mr. MILDE. Note an exception.

The WITNESS. I added 25 per cent to the cost——

TRIAL EXAMINER (interposing). No; he asked you whether or not you told him that. Do you understand? He isn't asking you what you did; he is asking you what you testified to.

The WITNESS. I testified that I added 25 per cent to the 5621 unit costs developed, based on Ford, Bacon & Davis performances, and that is a truthful statement and I never made anything but a truthful statement here.

* * *

5647 Q. And did the Hope Company receive a copy of those performances that were developed by Ford, Bacon & Davis, in connection with their 1929 valuation and keep them in its files —the Hope Company's?

A. No; I don't think so.

Q. Now, Mr. Antonelli, with respect to your Exhibit 60, will you be good enough, for the moment, to turn—will you turn specifically for the moment to the account 372 at pages 421 and 423?

A. Yes, sir.

Q. Dealing with office furniture and equipment?

A. All right.

Q. Now, were all the items set out at pages 421 to 423 expensed by the company in the past?

A. It was impossible for me to find if all of these items were expensed, because some of these items I could not identify. There is a possibility that some of these items were capitalized, but there was no way for me to find them on the company books. The description wasn't sufficiently clear.

Q. Did you say there was a possibility that some of these books had been capitalized?

A. I am not referring to the books, I am referring to the cabinets and so on.

Q. Well, then, if any of those were capitalized on the company's books to that extent, there is duplication.

5648 A. Oh, no. There isn't duplication. If this was on the books and I wasn't able to identify it, I left it out. I didn't take anything on the books that I couldn't identify. I prepared an inventory in the field and then reconciled it to the books, and if I didn't find the item and I wasn't sure that is the item excluded, I didn't use it.

Q. Well, if any of these were not on the books, what adjustment did you make in the account, or did you estimate the entire account?

A. If I didn't find it on the books I excluded it and didn't use it at all.

Q. Now, with respect, for a moment, to the law book costs which you shown on there, totaling, I think—oh, well, whatever it does total?

A. It is about $14,000.

Q. Yes. Where were those costs charged in the past?

A. They were charged to operation.

Q. To an operating expense account; is that correct?

A. Yes, sir.

Q. And does the company still continue that practice?

A. I don't know.

Q. Now, assume that the company does still continue that practice, Mr. Antonelli, of expensing law books purchased and you were bringing your inventory down to June 30, 1941, the
5649 law books have been purchased between the date of your estimate and June 30, 1941, would you include in the cost of the property brought down to June 30, 1941, the cost of the books purchased between December 31, 1938, and June 30, 1941?

A. If I were determining the actual, original cost of these properties, regardless of what the company is doing on their books; yes, I would.

Q. Then your answer to my question is yes; is that correct?

A. Yes. I——

Q. (Interposing.) If you are bringing your original cost determination down to June 30, 1941, you would include within the original cost the amounts that had been expensed by the company from January 1, 1939 to June 30, 1941 for law books, and charge to operating expense; is that correct?

Mr. MILDE. If they still exist in 1941?

Mr. SLAFF. Certainly.

A. Yes; if I were determining the original cost as of that date I would include them; yes, sir.

By Mr. SLAFF:

Q. And that you would do under the prevailing system of accounts, to wit: The West Virginia System of Accounts and the Federal Power Commission System of Accounts, applicable to the Hope Natural Gas Company?

A. I didn't say anything about the accounts now. You
5650 asked me if I would bring in the original cost—my original cost. Now in the prevailing accounts that is something else.

Q. Well, I mean, you realize that the West Virginia System of Accounts has been effective since January 1, 1939, and the Federal Power Commission System of Accounts has been effective since January 1, 1940; you realize that?

A. Yes, I do and——

Q. (Interposing.) And you answered——

Mr. MILDE (interposing). Has he finished——

Mr. SLAFF (interposing). Well——

The WITNESS (interposing). Go ahead.

By Mr. STAFF:

Q. (Continuing.) And you made your previous answer in the light of that knowledge and realization?

A. Yes, I did, but at the same time, as I said before, you asked me to bring this original cost up to date for the purpose of determining the complete costs of the properties. Now, I wasn't speaking or referring to any accounting methods that the company is following or the way they are going to set up their books after 1939 and so on. I was referring to the original cost of the property in order to determine the complete cost of this property.

Q. So, just as you disregarded the accounting of the company, pursuant to previously controlling systems of accounts, so, too, you would in that respect disregard the presently
5651 existing systems of accounts; is that correct?

A. Well, I wasn't doing an accounting job, Mr. Staff.

Q. No, no. Can you answer the question, Mr. Antonelli?

A. I am answering it. I say that I wasn't doing an accounting job. I was just determining the original cost of these properties, that is all. This is not a bookkeeping job where you have to show the amount on the books and how much you capitalized and how much you are going to set up in an account, 107 or 100–5 and so on. This is just supposed to show what is the original cost of the Hope properties and you asked me to bring it up to a later date, and I said that I will include all of the items regardless of the expense capitalized to the company as of any date that you wish me to do so.

Q. Yes. So that the fact that the presently existing systems of accounts were not in effect as of December 31, 1938; that makes no difference in your method and in your approach?

A. Not as far as determining the actual original cost of these properties is concerned; no, sir.

Q. You think it is entirely proper, of course, I assume, to expense an item during one year and to charge it as part of the capitalized original cost of the company at the end of that year also; is that correct?

Mr. MILDE: There is no testimony to that effect and if
5652 that is supposed to be a summarization of his testimony, it is inaccurate.

Mr. STAFF. I am asking him. He can tell me if it is inaccurate or an unfair summarization.

TRIAL EXAMINER. Objection is overruled.

The WITNESS. That is an accounting problem. As I stated before, I didn't try to set up the company books. I didn't care if it was expensed or if it was capitalized. I said it so many times. I just determined the original cost of these properties. That was my problem.

Mr. SLAFF. May I have the question, please?

TRIAL EXAMINER. Read the question.

(Whereupon, the pending question, as above recorded, was read by the reporter.)

A. I don't know if it is proper or improper. That is an accounting problem.

By Mr. SLAFF:

Q. I am asking you whether you consider it proper, Mr. Antonelli?

A. I didn't have to consider it.

Q. I am asking you to consider it right now and tell me whether you consider it proper or not?

Mr. MILDE. Well, I object to that. That isn't proper examination of Mr. Antonelli.

Mr. SLAFF. Do you want the record to note that I was frowning at the witness at that moment, too?

5653 Mr. MILDE. No, I didn't suggest that. You usually smile at him.

Mr. SLAFF. Of course it is thoroughly proper cross-examination to go into the basis of the theories upon which he predicated his original cost.

Mr. MILDE. Not at all. This is an accounting question and this witness has said over and over again that he isn't an accountant, he is an engineer, and this is purely a cross-examination directed to test a man's accounting knowledge or his approach to accounting problems, and Mr. Antonelli hasn't been presented in that light, and he isn't an accountant, and this has nothing to do with his testimony whatsoever.

TRIAL EXAMINER. Well, it seems to me that the witness has gone somewhat beyond engineering matters in determining the original cost in this case. He hasn't qualified as an accountant, I don't believe.

Mr. SLAFF. I certainly agree with that last statement of the Examiner's wholeheartedly.

Mr. MILDE. Well, I don't think that is quite accurate except to this extent: That he had to set up these properties in accordance with the classification as prescribed in the code of accounts. The

purpose of that was so that we could use his work in our books when the time came, when we had to reclassify and determine the original cost of our properties in accordance with the code.

5654 What he has done is determine the original cost, that is what the properties actually cost and then he has reclassified it in accordance with the method of classification prescribed in the code of accounts, but I think that is as far as he has gone into the accounting field, if that really is an accounting field.

TRIAL EXAMINER. Well, it seems to me that a study of these vouchers and all that kind of stuff is accounting, certainly to a great extent. He has had to make lots of determinations, I would imagine, that were beyond the field of engineering. As a matter of fact, the witness was qualified, was he not, as a valuation expert?

Mr. SLAFF. Yes.

TRIAL EXAMINER. Including costs?

Mr. MILDE. I think that is right. He has worked on valuations for a good many years. My objection to this question was that it is purely an accounting question.

TRIAL EXAMINER. Well, I am inclined to agree with you so far as that is concerned. I am also inclined to the view that his opinion with respect to the matter isn't going to make a great deal of difference anyway.

Mr. MILDE. I think that is right.

Mr. SLAFF. Well, that may be so, but I think it is very illuminating as to his entire approach and as to the entire approach to the company.

5655 TRIAL EXAMINER. Objection is overruled. Answer the question.

Mr. MILDE. Note an exception.

* * *

A. Well, nobody has capitalized it one year and expensed it the other year. The company did not do that. They expensed it prior to 1939 and are still expensing it.

* * *

TRIAL EXAMINER. Mr. Slaff just wants to know what you think about that.

The WITNESS. Well, it all depends on the policies of the company. It depends on what the items are and I just don't know how to answer the question, if it is proper or it isn't proper.

* * *

By Mr. SLAFF:

Q. Well, with respect to specific items that we were discussing a few minutes ago—law book, for example—do you consider it proper for the company to expense the cost of those books
5656 during the year and at the end of the current year to include those same costs as part of the capitalized original cost of the company's property?

* * *

The WITNESS. Are you talking about the same year now or ——

By Mr. SLAFF:

Q. (Interposing.) That is right.

A. Will you give me an example?

Q. Sure.

A. All right.

Q. Bringing your inventory down to January 1, 1940, the company during the year 1939 expensed $1,000 for law books and charged it to expenses?

A. Yes.

Q. Now, do you consider it proper for the company, at the end of that year, to include those expenses as part of the capitalized original cost of its property?

A. Well, it might be during that year that the company thought the items should be an expense and at the end of the year they thought they had made an error or something like that.

Q. No; there is no question of error. They properly expensed them under the controlling system of accounts.

A. That still depends on the policy of the company.

5657 Q. Well, I have given you the policy of the company, Mr. Antonelli, and I want you to tell me whether you think that that is proper action?

Mr. MILDE. Well, I object to the question. Proper under what? Is it in accordance with some code of accounts or according to——

Mr. SLAFF (interposing). Any way he wants to look at it. Code of accounts, code of ethics—any code he has.

The WITNESS. Under the code of accounts, if the company has decided that this item should be expensed, I would say that it would be improper to capitalize it.

By Mr. SLAFF:

Q. I see. Then I understand your present testimony to mean that you consider it improper to capitalize items which have

previously been expensed by the company exercising its discretion under a controlling system of accounts, is that correct? (Objection overruled.)

* * *

5658 A. Yes, sir.

By Mr. SLAFF:

Q. And that applies, of course, not only to the specific account that we were discussing, but throughout?

Mr. MILDE. Same objection.

By Mr. SLAFF:

Q. I mean, you weren't confining that to a specific account, were you?

Mr. MILDE. Same objection.

TRIAL EXAMINER. Objection overruled.

A. No, sir.

* * *

6250 PETER ANTONELLI was recalled as a witness, having been previously sworn, was further examined and testified as follows:

Cross-examination by Mr. SLAFF:

Q. Mr. Antonelli, one of the matters we were discussing the other day was what the basis for your use of 6 per cent as the rate which you used for interest during construction was. Do you remember that?

A. Yes, sir; I do.

Q. And it is a fact, is it not, that you used 6 per-cent for interest during construction as being the legal rate of interest in the State of West Virginia?

A. Yes, sir.

Q. And that determination of 6 percent as the interest rate was upon that basis and not upon any study of cost of money to the Hope Company in the past; is that correct?

A. I looked over my papers and I find that the legal department of Hope was instructed to make a study as to the various rates, and what was the legal rate in West Virginia, and that is what I had in mind when I said that there was a study made up.

6251 Q. Yes, but the study was, as you have just testified of the legal rate of interest, statutory rate of interest in West Virginia, and not of any cost of money expense of the Hope Company; is that correct?

A. That is correct.

Q. As a matter of fact, construction by the Hope Company was financed primarily out of its own funds, isn't that so?

A. I don't know how they were financed.

Q. You just——

A. [Interposing]. I never had occasion to find out.

Q. I see. Now, with respect to your testimony that many of the items contained in Exhibit 60 were inventory adjustments, you recollect that testimony, do you not?

A. Yes, sir.

Q. Did you have in your Exhibit 20 a statement of the inventory adjustments contained in column 6 of Statement "B," page 31; is that right?

A. Yes, sir.

Q. And you furnished, did you not—and the net amount of the inventory adjustments was a red figure of $1,804,000, is that not correct?

A. That is correct. As far as property constructed by the company is concerned, and property purchased from non-
6252 utilities or from utilities where not an operating unit of the system, yes; that is correct.

Q. Now, you furnished, did you not, to the Commission's staff, a breakdown of that figure, showing the total gross debits, and the total gross credits involved?

A. I recall furnishing a statement of that type; yes, sir. I just can't picture it now, what it looks like, but——

Q. [Interposing.] Well, will you examine those sheets which I hand you [handing]; and ask you if that is the breakdown which you furnished the Commission staff?

A. Yes, sir.

Q. And those contain—those show, do they not, a total of—strike that. What amount do they show as debit, and what amount as total credit figures?

A. It shows as debit figure $4,383,474.28, and as credit $6,187,867.76.

Q. Leaving the net credit of $1,804,000 shown in your Exhibit 20; is that correct?

A. Yes, sir; as far as property constructed by the Hope Company is concerned, or purchased from nonutilities.

Q. The debit amount of four million odd represents properties, cost of properties, which you have added to the capitalized cost.

the book cost, of the Hope Company properties; is that right?

6253 A. No; that is only a correction to the company records, a property that was found on the company—I mean, that were on the company books but not found in the field. Now, properties that were found in the field and not found on the books, they came under direct material and labor cost, not capitalized cost.

Q. [Interposing.] What does the debit amount of four million odd represent?

A. That represents adjustments of all kinds that were made on the company records. It isn't only an inventory adjustment now.

Q. But that does include inventory adjustments, does it not?

A. Yes, is does.

Q. And the total debit figure, including those inventory adjustments, is, as you stated, some four million dollars odd; is that correct?

A. Just a moment. Yes, it does. The inventory adjustment is only $406,000 out of it.

Q. In addition to those inventory adjustments, however, as I understand your position now, after your testimony of July 7, there are still additional inventory adjustments to be made; is that correct?

A. I would like to make an explanation in connection with the previous question. This $4,000,000 debit is made
6254 up of all kinds of debits. You understand that. The adjustments that were made are as follows: Elimination, depreciation capitalized on property purchased, inventory adjustments, transfers from and to utility plant in service accounts, transfers to other accounts.

TRIAL EXAMINER. They are all debit items?

The WITNESS. That is right. I want to make sure that that is not all inventory adjustment of four million dollars.

By Mr. SLAFF:

Q. Have you completed your answer?

A. Elimination of capitalized unproductive deeper drilling, elimination of arbitrary rig charges, other kinds of adjustments and miscellaneous adjustments, and so on. I want to make that clear before we go ahead.

Q. Yes, of course. All those adjustments are developed from the inventory which you made of the property of the Hope Company; that is correct, is it not?

A. All of those adjustments are adjustments made to the company books.

Mr. SLAFF. Will you please repeat my question?

(Whereupon, the pending question, as above recorded, was read by the reporter.)

A. No; that is not correct.

6255 By Mr. SLAFF:

Q. Well, why did you change the books? What was there that led you to change the figures stated on the books?

A. Well, we reconciled the books with an inventory that was made in the field.

Q. All right.

A. I am not done yet.

Q. Go right ahead.

A. And the amount that is reflected in this $4,000,000 is a correction to the books.

Q. Certainly.

A. To that there were other inventory adjustments which were not included in the company books, and which were included by me on these direct material and labor costs not previously capitalized.

TRIAL EXAMINER. These adjustments were made then in order to reconcile the books with the inventory; isn't that correct.

A. As far as we can do it from the books, but there were other inventory adjustments. For instance, we went out to the field, we might have have found a house, and that house was not shown on the company books, not included in any place in the company books. Therefore I included it under the direct material and labor costs. It is included in that Exhibit 60 that we have been talking about

6256 By Mr. SLAFF:

Q. Mr. Antonelli, do you have any such type of cost included in your inventory adjustments in column 6 of Exhibit 20, as you have just stated to the Examiner?

A. What type of ——

Q. Property which you found out in the field which did not appear on the books. You have such adjustments in the totals included in column 6 of Exhibit 20, don't you?

A. I might have some that I was certain that the company capitalized; yes.

Q. Yes, well, then ——

A. [Interposing.] I might. I don't know. I would have to search in my items to find them. I can't tell you offhand. There must be some.

Q. If it wasn't on the books, Mr. Antonelli, how was it capitalized?

A. I will tell you an example of that.

Q. Yes.

A. For instance, in a compressing station, we found a pump in the field and it was not found on the books. However, on the books we found a pump with another serial number. We weren't sure that was the pump that we were talking about and, inasmuch as the policy of the company has always been to capitalize pumps (we never found a pump expensed) we
6257 did include the pump in this adjustment column as a correction to the books. That is the only kind of examples that were included under the adjustment column.

TRIAL EXAMINER. Didn't you assume that that pump had already been capitalized?

The WITNESS. No, because—yes; but inasmuch as we didn't know what pump it was we eliminated—we included in our inventory everything that we were able to say a hundred percent that that was the item. Now, we eliminated from the books all items that we couldn't a hundred percent tie down to serial numbers or something like that.

Mr. MILDE. In that illustration, Mr. Antonelli, you would write out in the books a pump without a serial number?

The WITNESS. Yes.

Mr. MILDE. At whatever cost it was?

The WITNESS. That is right. And substitute this one that I found out in the field.

Mr. MILDE. With whatever its voucher cost was?

The WITNESS. That is right. No duplication or ——

TRIAL EXAMINER [Interposing]. All right.

By Mr. SLAFF:

Q. So you did, of course, deem it important in your determination of original cost to make a careful study of the com-
6258 pany's prior practices with respect to either capitalizing or expensing items of property, did you not?

A. Well, to that extent, yes. I made a study and I did find that in case of pumps or items of that type, the company always did capitalize those items. That was part of my study.

Q. Yes; then we are in agreement, are we, Mr. Antonelli, or tell me whether we are, that in determining the original cost of a natural gas company's property, it is important to make a determination in advance of what has been the company's policy and practice with respect to expensing or capitalizing items of property?

A. Well, it did not make any difference to me as far as determining original cost. The only thing that I was very much concerned about was that I show the picture very clearly. If the company capitalized the items, we put them under the capitalized cost. If we couldn't find it, then we show it under cost not previously capitalized, or under direct material and labor cost not capitalized by the company books. That was just a matter of setting the cost at each proper column. I could have done if the other way; show one total.

6259 Q. Well, Mr. Antonelli, you didn't make that determination just for the sake of making it, did you?

A. Oh, no ——

Q. [Interposing]. You had a purpose?

A. I had a purpose and the main purpose was that when in the future the company set up their continuing property records, they could utilize all my working papers to the best advantage.

Q. And what is more, in your judgment, you couldn't come to a proper determination of original cost, according to your own lights, without making such a determination of the company's policy in the past; isn't that correct?

A. What policy are you referring to?

Q. Whether particular items were to be expensed or capitalized.

A. Well, If I found that the company had always capitalized——

Q. [Interposing]. I wonder if you can answer the question!

A. I am trying to answer it.

TRIAL EXAMINER. Read the question, please.

(The question was read by the reporter.)

TRIAL EXAMINER. You can answer that "yes" or "no," can't you.

The WITNESS. Yes; I did make a study to find out what
6260 items were capitalized and what were expensed.

By Mr. SLAFF:

Q. And the reason that you made that study, Mr. Antonelli, was, was it not, that you could not come, in your own judgment, to a proper determination of the original cost of this company's property without making such a study?

A. No, sir; that didn't have anything to do with my reasoning. As I said before, the reason that I did it that way was to prepare the ground for the company to set up their books in accordance with the new code of accounts.

Q. What were they supposed to set up on their books in accordance with the system of accounts?

A. In accordance with the system of accounts they were supposed to show the adjustment—in other words, the difference between the book cost and the original cost of property constructed by the company in Account 107, Plant Adjustment.

Q. So you had to make this determination of the company's policy as to capitalizing or expensing items in the past in order that the company could properly set up on its books the original cost of its properties; isn't that right?

A. Well, I don't know that; the company set up their books in accordance with the new code of accounts.

Q. Well, can't you answer the question just as I have put it, Mr. Antonelli?

6261 Mr. MILDE. Well, I submit he has answered all the questions fully, and just because you slip in a few different phrases doesn't change the answer in the slightest.

Mr. SLAFF. I don't want him to change his answer; he can stick by his guns as long as he wants to, as long as he thinks his guns are right. I don't want him to change a thing, but I think he can answer the question directly.

TRIAL EXAMINER. Read the question.

(The question was read by the reporter.)

Mr. SLAFF. The question is susceptible of a direct categorical answer.

TRIAL EXAMINER. They couldn't have set them up in that manner except on the basis of your study, could they?

The WITNESS. Yes; on the basis of my study they could set up their books in accordance with the new code of accounts; yes.

By Mr. SLAFF:

Q. And in accordance with that system of accounts, show the original cost of their property; isn't that correct?

A. Well, I will have to explain that a little bit. This continuing property record, or the new books, will show in one column the original cost and in another column it will show the book cost; and in another column it will show the amount that has been previously capitalized. It shows all of those three amounts. It will show the book cost, it will show the items
6262 not previously capitalized, and it will show the original cost. It will also show the adjustment, the 107 adjustment, and it will show the 100.5 adjustment, the Plant Acquisition Adjustment.

Q. Well, I don't know that that explanation was called for by the question, but I am glad to have it on the record. Now, I would like to have the question answered, and I will repeat it for you, Mr. Antonelli. Isn't it a fact that you had to make a determination of the company's policy in the past with respect to capitalizing or expensing different types of property in order that the company might be able to set up on its books, in accordance with the presently controlling system of accounts, the original cost of its properties?

A. Yes; I did make a study to find out what items were capitalized and what items were expensed.

Q. And wasn't that study necessary for the purpose which I have just indicated?

A. It wasn't necessary as far as determining the original cost for Exhibit No. 20, no; but it was necessary for the company in setting up their continuing property records. We were trying to do two jobs at one time.

Q. But, Mr. Antonelli, in setting up the continuing property records, you have got to start with original cost, have you
6263 not, and then make your adjustments that you have been describing?

A. Oh, you can do it many ways.

Q. Well, isn't that the way you did it?

A. Well, are you referring to the original cost or the continuing property records now?

Q. To your continuing property records, to the statement on the company's books, that is to appear on the company's books.

A. Well, in that case you show your original cost, and you show your adjustments, and you show items not capitalized.—previously capitalized, and you show 107 and 100.5.

Q. And in order to show that original cost on the company's books, didn't you have to make this determination as to what the company's policy was in the past with respect to capitalizing or expensing different types of property?

* * *

6267 The WITNESS. As far as setting up the books, I did have to make that study, but as far as determining the original cost for this Exhibit No. 20, it wasn't necessary.

By Mr. SLAFF:

Q. Now, are you planning to set up any different original cost on the company's books from what you have presented here in this case?

Mr. MILDE. I object to that.

Mr. SLAFF. Well, the reason I ask that—I have no hesitation in stating it—is because I understand that he says it was necessary, in order to set that up on the company's books, but wasn't necessary here. So, I want to know if there is any difference
6268 between what he proposes to set up on the company's books, and what he presented here, as to original cost.

The WITNESS. Well, I am just gathering information and getting—as Mr. Milde said—the figures ready, but I am not certain how those figures are going to be used.

By Mr. SLAFF:

Q. It is sort of nice that Mr. Milde said it for you, isn't it?

A. Oh, no.

Q. Mr. Antonelli, regardless of how they may be used by someone else, you have very definite ideas as to how they should be used, don't you?

A. I don't believe anybody knows just exactly how they are going to be used.

Q. No, no, Mr. Antonelli, but you have your judgment as to how the figures should be used; isn't that right?

A. Well, everybody has ideas, but as far as this case is concerned, I just don't know how they are going to be used.

Q. Aren't you posting on your continuing property records that you are setting up or proposing to set up for the company the same original costs that you show here in this case?

A. We are posting only certain columns, not all of the columns,—we are not filling out all the columns.

6269 We have posted the description, and we have posted the book cost because we know that that isn't going to change; and we have posted some other columns, but we haven't finished anything, and we are not going to finish anything until somebody decides what is going to be done with it.

Q. Now, then, will you tell me, Mr. Antonelli, whether in your judgment, as you view the situation, the original cost to be set up on the company's books is any different in your conception today from the original cost which you have presented here in evidence?

* * *

6272 The WITNESS. Well, my original cost is set up in such a way that it has different columns including the amounts
6273 that came from different places, and it was done with the purpose in mind that the company would pick up and choose or rearrange the columns in any form they wanted and decide what they were going to set up on their books after it was decided what "original cost" is.

TRIAL EXAMINER. After who decided what original cost is?

The WITNESS. Well, the company or the Commission, or after it was decided definitely what original cost was.

6274 Mr. MILDE. You mean original cost under the Code of Accounts?

The WITNESS. Yes, original cost under the Code of Accounts. I determined the original cost, and I set up the capitalized items under the capitalized columns, and I set up the expensed items under the expensed columns, and I set up all the rest of the items in separate columns, and that is the way it is shown.

Now I can't tell what it will be, what will be the original cost as per the continuing property records, or not.

By Mr. SLAFF:

Q. Mr. Antonelli, I am not asking you as to what anyone else may determine original cost to be, whether it be the court or commission or anyone else. I am confining myself solely to your judgment today, your conception today, and I am asking you whether today, in your conception, there is any difference between the original cost which you have presented here in evidence, and the original cost to be set up on the company's books? Will you please tell us?

A. As far as the totals are concerned, there wouldn't be any difference. As far as the classification, there might be. Maybe

the Commission will order certain items to be charged to 107, and others charged to 100.5, and so on.

Q. But as far as you are concerned—forget, Mr. Antonelli, please, or disregard if you will, please, what the
6275 Commission may order done or what the court, some court, may order done, and confine yourself, in your answers, just to your conception—isn't it a fact that the orignal cost, as you have presented it here in evidence, is, in your judgment, the original cost which should be set up on the company's books as you have here presented it?

A. Well, I say that the original cost is the original cost. Now I don't know how it is going to be set up.

Q. I know you don't know how somebody else is going to pick up where you left off, but I am asking you whether it isn't your judgment that the original cost which you have presented here in evidence, is the original cost which should be set up in the company's books in the same manner as you have here set it up in evidence?

* * *

6276 The WITNESS. I don't know what should be set up on the books. The original cost, as I determined it, I think is the right original cost, and it is set up in such a manner that you can take any kind of figures or combination of figures, but what should be set up on the books, I can't say, I don't know. It just never occurred to me, and I didn't have to know it.

By Mr. SLAFF:

6277 Q. Mr. Antonelli, aren't you in charge of the company's reclassification study?

A. Yes, sir; I am.

Q. Isn't that to reclassify the amounts that should be set up on the company's books?

A. Yes, sir, and we have gone as far as we can, but we havn't finished the job, and we don't know what to do, we are waiting now.

Q. And you have a judgment today, don't you, as to whether the original cost as you have determined it, in evidence, and presented it here in evidence, is any different from the original cost which, in your judgment, should be set up on the company's books?

A. As far as the total original cost is concerned, there shouldn't be any difference, and can't be any difference. That is the cost.

But how it is going to be set up on the books, that is a different matter.

Q. Mr. Antonelli, with respect to the reclassification study which you are making for the company, and the cost of which is some several hundreds of thousands of dollars, as I understand it, don't you today have any idea as to whether there should be any variation in the detail of the original cost between the way you have presented it here in evidence, and the way it should be set up on the company's books?

A. What detail are you referring to?

6278 Q. Any detail.

A. Yes; but there are all kinds of details. Are you referring to units of property, or to costs, or what?

Q. All right, let's take the accounts to which the amount should be charged?

A. That doesn't mean anything to me.

Q. The accounts under which the amounts set up should be set up—does that mean anything to you?

A. What accounts?

Q. Do you know what gas plant accounts are?

A. Yes; and I don't understand what you mean. Are you talking about adjustment accounts or plant accounts, or what?

Q. All accounts.

A. That doesn't mean anything, now.

Q. All right, you have presented certain original cost figures in evidence here, have you not?

A. Yes, sir.

Q. Will you tell us how you set them up by accounts?

A. Do you refer to Exhibit No. 20 now?

Q. Yes; 20 and 60.

A. All right, I classified them as to kinds of property, land and rights-of-way and leases, and followed this new Code of Accounts.

Q. Now in your judgment, should those amounts be classified any differently on the books of the company?

6279 Q. Well, not knowing what the Commission is going to decide, I will have to say again that I don't know.

Q. Do you have any judgment today with respect to that? I mean, out of all the close to three-quarters of a million dollars that has been spent for reclassification today, and the spending of which, I take it, you have been supervising, do you mean that you haven't yet evolved a judgment as to whether there should

be any difference between the way the amounts were set up in your original cost study in evidence here, and the way they should be set up on the company's books?

A. Well, this here is only a determination to show the original cost for rate-making purposes, and the other is something else.

Now the other has to be set up in accordance with the Code of Accounts. Now I will tell you how that was done. I might describe the columns that we used. But that is all I can say. I haven't got any judgment of what is going to be done. I know that in one column——

Q. (Interposing.) Let me break in. Do you have any judgment as to what should be done, that is the question that I have been trying to have your answer?

A. If I knew what should be done, we could have finished the job a long time ago. We don't know.

Q. You mean you just don't have any idea of what, in
6280 your judgment, ought to be done in that respect?

A. Well, we have been trying very hard to find out what should be done.

Q. And as far as you are concerned, you are still in the dark; is that right?

A. We have all the figures, we are just waiting for a decision.

* * *

Mr. Slaff. Well, are you still in the dark, Mr. Antonelli, in your own mind, as to what should be done with respect to setting up original cost on the company's books?

A. Well, I can give you my own personal opinion. Now that is my own personal opinion. We show first the material, the labor and the overheads, and the total original cost as I
6281 determined it.

Trial Examiner. You mean as you determined it in this case?

The Witness. Yes, sir, that is recorded to the penny.

After that—it is my own opinion, now—I will show the amount that is not previously capitalized on the company's books. It will show a column which is exactly the amount of the adjusted book cost that we have in here; and also it will show a column of the .107 adjustments which is Plant Adjustments to Property Constructed by the Company or Purchased from Non-Utilities; and another column, 100.5, Acquisition Adjustments, which is the difference between the original cost of property purchased from other utilities, and the purchase price.

Now that is my personal opinion of what should be done o the books, and the books will show my original cost, they wi show the book cost; we could get the adjusted book cost; w could get the non-capitalized items; and we could get the adjust ments, the plant adjustments, I mean; and the acquisition adjust ments.

It gives a complete picture of what was done, and that is wha we are doing, but we haven't gone beyond a certain stage becaus we don't know what to do next.

By Mr. Staff:

Q. Well, that is exactly what you have done in this case
6282 in evidence, in your exhibits here in this case, Mr. Antonelli is it not, except that certain of the columns shown on pag 31 you show, and you propose to show, in Account 107, and cer tain in Account 100.5?

A. There is no 107 and 100.5 here.

Q. That is right, you propose to show the amounts shown here in certain of the columns on page 31 of Exhibit 20, in Account 107 and in Account 100.5, on the company's books?

A. This statement here—I am referring to Statement B, now of Exhibit No. 20—shows the relation of the book cost to the original cost and also shows, separately, the property constructed by the company and purchased from other utilities, and it shows what was on its books, what were the adjustments, what was capitalized, how much was overheads, and so on.

Q. That is right. In effect, Mr. Antonelli——

A. (Interposing.) I think it is an intelligent way, at least I thought it was an intelligent way, and tried to make it so clear that anybody would understand what it is. I could have bunched all the figures and given you just original cost, and it would probably have been just as good.

Q. I am not at the moment implying that this is not an intelligent way of setting out the results that you came to. What I am asking you, if you will listen, is this: Isn't it a fact that what you have told us as to what you propose to have set
6283 up on the books, in your opinion, is just what, essentially, you have done here in your Exhibit 20, except the amounts in, say, columns 7, 8 and 9 and 10 of Statement B on page 31 will be included in Account 107?

A. No; 107 is plant adjustments——

Q. (Interposing.) Well, let me put it this way: The difference between original cost, as you determined it, and book cost

in so far as the amounts in those columns enter into that difference, will go into Account 107; is that right?

A. Well, I think it will go; I don't know.

Q. That is your judgment?

A. That is my opinion; I don't know.

Q. And the difference between purchase price and original cost, with respect to prior utilities, will go into Account 100.5; that is right, isn't it?

A. That is my opinion, that is in accordance with the Code of Accounts, that is my opinion, but I don't know if they are going to do it or not.

Q. Then if I may summarize, it is your judgment and opinion today that the original cost to be set up on the company's books is the original cost as you have determined it for purposes of this case, and as you have explained a few answers back it should be set up on those books?

A. No, sir; I didn't say that. I said how I did it, and what I thought it was going to be, and what was my personal opinion.

6284 Mr. SLAFF. Now, will you read my question, please?

(The question was read.)

By Mr. SLAFF:

Q. Isn't that a correct summarization?

A. The original cost that I set up in Exhibit No. 20 is to show the actual dollars paid by this company, and the amounts paid by the prior companies for property purchased from other utilities. That is the actual amount spent, what was the original cost. That was the reason for Exhibit No. 20; and the continuing property record, although utilizing all the same figures, they are set up differently, and I don't know what is going to be done with those figures.

Q. They are set up in somewhat different form, but all the basic facts and factors and figures are the same, are they not?

A. Sure they are, but as I said, my purpose was to determine the original cost of these properties, that is all, and that is all I had to do.

Q. I think you have told us that once or twice.

A. I have said it many times.

Q. Now then, in order to set up those facts on the company's books, you had to make a determination as to what had been the company's policy in the past with respect to expensing or capitalizing different kinds of property, isn't that correct?

6285 A. Well, naturally I analyzed all of the records and if I found the items under capitalized items, I put them under capitalized items. If they were expensed, I put them under expensed items. As I said before, we were trying to kill two birds with one stone. So I did find out and determine what was the policy of the company in regard to expensed items and capitalized items.

Q. And it was necessary for you to make that determination, was it not, in order to arrive correctly at your results?

A. It wasn't necessary as far as Exhibit No. 20 is concerned, no.

Q. We are talking about the costs that are to be set up, in your opinion, in your judgment, on the company's books.

A. I thought you were talking about Exhibit No. 20 all the time.

Q. Well, now, concerning yourself with the costs to be set up on the company's books, in your judgment it was necessary to make such a determination of company policy in the past with respect to expensing or capitalizing items, was it not?

A. Yes; certainly it was.

Q. You have presented here also Exhibit 99, which is entitled "Data Furnished the Federal Power Commission at its Request as to Amounts of Direct Material and Labor

6286 Costs, Unloading, Hauling and Warehouse Handling Costs, Indirect Field Costs and Overhead Costs not Capitalized, for Major Accounts, Classified by Years during which these Costs were Incurred by the Company," and that exhibit relates, does it not, to the determination, among other things, of overhead costs shown in your Exhibit 20?

A. This Exhibit was a request by Mr. Smith, and relates to direct labor costs not capitalized, and overheads.

Q. And the overheads to which it relates are the overheads which are shown in your Exhibit 20, is that correct?

A. Yes, sir.

Q. And the method of determining those overheads is shown in your Exhibit 20-A, is that correct?

A. The method was explained in Exhibit 20.

Q. Let me put it this way. Your method is stated in Exhibit 20, and illustrated by Exhibit 20-A, is that correct?

A. Well, it is stated and illustrated in Exhibit 20, and this (referring to Exhibit 20-A) is one page of the details of Exhibit 20.

Q. That is a summation sheet that illustrates your method, isn't it, and shows the percentages that you arrive at, that Exhibit 20–A?

A. Yes, sir.

Q. Your determination of overheads to be applied to con-
6287 struction was on the so-called dollar for dollar method, is that right?

A. As far as the general overheads are concerned; yes, sir.

Q. That is on the basis that a dollar of construction took the same amount of general overheads as a dollar of operations of the company, is that essentially correct?

A. Yes.

* * *

Mr. MILDE. Exhibit 20–A?

Mr. SLAFF. No; this Exhibit 99, which is the detail, and I want to get some statement here with respect to his underlying assumptions.

* * *

By Mr. SLAFF:

Q. I want to know, Mr. Antonelli, whether, in your conception, the construction operations of the company are essentially a by-product operation?

A. I couldn't answer that question; I don't know.

6288 Q. Well, let's go at it another way. It is a fact, is it not, that the principal business of the company is to operate its properties?

A. Well, that is outside of my line, I don't want to pass judgment on that kind of a question.

Q. Well, isn't that necessary, Mr. Antonelli—that is to say, is not a judgment with respect to that necessary in order to arrive at a proper basis of allocating overheads between construction and operations?

A. Oh, they do operate the company, and also supervise new construction work.

Q. But isn't it a fact that the principal business of the company is to operate its properties?

A. Yes, sir; it is.

Q. And then isn't it also fair to say that the construction operations, as carried out by the Hope Company, are what might be termed "by-product" operations?

A. Oh, no; in this case I have found out that the company's supervising forces spent a great deal of time in new construction work.

Q. Then as I understand it ——

A. (Interposing.) As a matter of fact, they spent more time than in operation.

Q. Then as I understand your last answer, the construction operations, as carried out by Hope, are not what might be termed "by-product" operations?

6289 A. I am just talking from experience in going through the records, and I noticed that the company's supervising forces were spending a great deal of time in new construction work.

Q. Then you would not term the construction operations of the company "by-product" operations?

A. Well, I don't know what you would call them, whether you would call them "by-product" or not, but they spend time on new construction work, and they spend time on operation. I don't know which is the "by-product."

Q. Well, is the construction work incidental to the operations, or is it the other way around, or are they on a parity of importance to the company?

A. I don't know, I can't answer that question.

Q. Well, Mr. Antonelli, wasn't that determination necessary to be made in order to determine the proper basis for allocating general overheads?

A. The basis was that after a great deal of study——

Q. (Interposing.) No, no, no—I have asked you whether that was necessary; I haven't asked you, Mr. Antonelli, what your basis was. I have asked you whether a certain determination on your part was or was not necessary to your determination as to how these general overheads were to be allocated. Will you please respond to that?

* * *

6290 The WITNESS. Well, if you knew how these overheads were worked out, you wouldn't ask me that kind of a question.

By Mr. SLAFF:

Q. I have asked you that question—suppose you answer it?

A. That is not the way I determined these overheads.

Q. You can't answer that question?

A. That is not the way I determined the overheads.

Q. Can you answer the question?

TRIAL EXAMINER. Was it necessary or was it not—that is all.

Mr. MILDE. Well, Mr. Slaff has a lot of words in there which may mean something, but they obviously don't mean anything to Mr. Antonelli.

Mr. SLAFF. I will reframe the question.

* * *

By Mr. SLAFF:

Q. In order to make a determination of how general overheads were to be allocated between operations and construction, didn't you have to come to a conclusion as to whether construction was a subsidiary part of the company's whole business, or whether it was on a parity with the operations of the company?

6291 A. No, I did not.

Q. And that was of no importance or consequence to you in your determination of overheads, is that correct?

A. No; not the way I determined these overheads.

Q. Now then, your assumption was, was it not, that a dollar of construction took the same general overheads that a dollar of operations took?

A. Yes, sir.

Q. And is it your answer that it takes that same dollar, regardless of whether construction is a subsidiary part of the company's whole business, or whether it is on a parity with the operations of the company?

Mr. MILDE. I want to object to that question unless Mr. Slaff states to the witness what he means by the phrases "subsidiary part" and "on a parity with the operations of the company."

Mr. SLAFF. Well, I have tried to use the term "byproduct operation." The witness didn't seen to have much of a concept of the term "byproduct operation."

Mr. MILDE. I don't understand what you mean by a subsidiary or a parity.

Mr. SLAFF. I think you understand, Mr. Milde, what I mean by "byproduct operation."

Mr. MILDE. Not as applied to a natural gas operation.

6292 TRIAL EXAMINER. If you used the expression "purely incidental," would that mean anything?

Mr. MILDE. That seems a little more like something that has some meaning. I don't know whether it would to Mr. Antonelli——

Mr. SLAFF. (Interposing.). Of course, if my friend Milde here wants to characterize the testimony of his witnesses as meaningless, far be it from me to dissuade him from that, but I have used that term simply because his witnesses have been using that term and have been decribing the construction operations of the Hope Natural Gas Company as "by product operations."

When it comes to determining whether or not one of the exhibits which the Commission has introduced was proper, Mr. Rhodes was very eloquent that our exhibits don't show full costs, because construction is just a "by product operation," construction is just incidental to the operations of the company. And I used those terms only because I thought that they were intelligible at least to the company people.

* * *

By Mr. SLAFF:

Q. Mr. Antonelli, are you familiar with what is meant by the "incremental basis" of allocating overheads?

6293 A. No, sir; no.

Q. Have you never heard that term used, Mr. Antonelli, with respect to overheads?

A. I might have, but I don't recall it.

Q. I mean you, right now, have no knowledge whatever as to what is meant in the accounting or engineering profession by the term "incremental method," with respect to prorating overheads; is that right?

A. Do you mean by that, breaking up the overheads to various parts of it—increments?

Q. No; I mean by that that an operation, which is a subsidiary operation, for example construction, possibly by an operating company, shall take only those additional overheads which are required by that work, and that the principal occupation of the company shall take the general overheads as they exist normally?

A. Yes, sir; I have.

Q. That is to say, you are familiar with that use of the term?

A. Yes, sir.

Q. You did not in this case pro rate overheads, your general overheads, on an incremental basis, did you?

A. No; I allocated them on a dollar cost basis between operations and new construction work. I did that because that was the only way possible to do it, having in mind the records

6294 available that were available.

Q. And did you make any determination with respect to how overheads had been charged in the past?

A. Well, in going over the company's records, I found that general overheads were not recorded on the company's records.

Q. That is, in the fixed capital records?

A. In the fixed capital records, yes; that is correct.

Q. That is to say, overheads had been expensed, is that correct?

A. That is right.

Q. Now, turning for a moment, Mr. Antonelli, to the problem of acquisitions by the Hope Company, you are familiar with the Clarksburg Light & Heat Company acquisition?

A. Yes, sir; I am.

Q. Was that an affiliated company?

A. Yes, sir; it was an affiliated company.

Q. And that was purchased, was it not, for a consideration which consisted of some $10.67 in cash and 13,693 shares of Hope Natural Gas Company common stock; is that correct?

A. I don't know anything about that. I wasn't interested to determine how the sale took place.

Q. Did you testify that the Hope Company had not recorded the original cost of this property on its books?

A. I don't recall, but I think I testified that on the
6295 company's books, the Clarksburg Light & Heat Company is recorded at vendor's book cost, and the difference between this cost and the purchase price was added to Hope's depreciation reserve. I believe I testified to that—but that is the fact.

Q. Now do you know, or what is your testimony with respect to whether or not the property of the Clarksburg Light & Heat Company was recorded on the books of the Hope Company at original cost?

A. The property was recorded at book cost, at vendor's book cost, of $2,233,252.76.

6296 By Mr. SLAFF:

Q. You stated as follows at page 5049 of the transcript, record of July 7:

"Question—," Do you want to have that before you?

A. Yes.

Mr. MILDE. [Handing.]

By Mr. SLAFF:

Q. Beginning at line 4:

"Question: Did you ever find the company recorded or attempted to record any estimate of the original cost of purchased property at the time of acquisition?

"Answer: No, sir."

You so testified, did you not?

A. Yes, sir; I did.

Q. All right. Now, let's go to the—and was that supposed to apply to the Clarksburg Light & Heat Company acquisition as well as others?

A. It applies to all purchases.

Q. Now, you made a study of that purchase, did you?

A. Yes, sir; I did.

Q. All right. Now, what was the consideration given by Hope Company for the property which was acquired?

A. I went back to the vouchers and got the actual cost. That is all I was interested in.

Q. Did the vouchers show the consideration given by
6297 the actual cost paid by Hope Company?

A. This was a prior utility company and we had practically all of the records available.

Q. Well, did the vouchers show the——

A. (Interposing.) I had thousands of vouchers. I had to go by item—unit by unit and well by well—and found the cost. It wasn't necessary for me to go to purchase vouchers. Purchase vouchers don't show anything.

Q. Did you go to the purchase vouchers as you did in connection with the Flaggy Meadow acquisition you testified to on July 7?

A. I——

Q. (Interposing.) Did you or didn't you?

A. Yes; I have seen the purchasing voucher; yes.

Q. O. k. Now, what is the consideration recorded there?

A. Well, as I stated now, the cost to the vendor was—I mean the purchase price was $1,369,310.67.

Q. That is the amount that was recorded in the books in the plant account, is that right?

A. Well, I would have to get the voucher before——

Q. (Interposing.) Yes. Will you do that?

A. Well, I haven't got it here.

Q. Well, I will put it this way to you, Mr. Antonelli: Suppose you answer to the best of your present information and knowledge and make any subsequent corrections that you deem

6298 fit. Is it not true that the consideration given by Hope for that property was some $10.67 in cash and 13,693 shares of Hope common stock?

A. My recollection is that that figure is correct; yes.

Q. All right. Now, is it also not a fact that the value placed on that stock by the Hope Company was, at the time of issue, $1,464,114.75?

A. Well, I am sorry. I don't know. I don't remember.

Q. You can verify that, can you not?

A. Well, yes.

Q. Do you have here any data from which you can verify that?

A. No. Not in this place.

Q. Do your assistants here have any such information?

A. No, sir.

Q. That consideration is shown on the purchase voucher?

A. I think it is shown; yes.

Q. Let me refresh your recollection, Mr. Antonelli, while I think of it. I show you a letter dated May 17, 1940, on the letterhead of the Hope Natural Gas Company, addressed to Mr. J. A. Hennig, Examiner in charge, Federal Power Commission, Clarksburg, West Virginia, and signed by George N. Reed, and ask you whether that refreshes your recollection as to the facts?

* * *

6299 Q. So, then, it is a fact that the consideration given by Hope for that property in addition to the $10 of cash, was common stock which Hope valued at $1,464,000. That is correct, is it not?

A. Yes; according to this letter; yes, sir.

Q. And that amount of consideration paid by Hope for this property was $94,814.75 above the net book cost of the Clarksburg Company property, isn't that correct?

A. That is, according to this letter, that is correct. It states so.

6300 Q. And that amount, that difference, to wit: that amount of 94-odd thousand dollars, was recorded by Hope in a "property appreciation account," was it not?

A. That is what the letter states and I suppose that is correct; yes.

Q. And that respresented, did it not, appreciation over the original cost of the Clarksburg Company's property as the Hope Company then conceived it to be?

A. No, sir.

Q. Isn't that correct?

A. No, sir. The book cost of the Clarksburg Light & He Company did not reflect the original cost of the Clarksburg Lig & Heat property.

Q. The book cost of the Clarksburg property did not repres the original cost as you now conceive that original cost to b That is correct, is it not?

A. Now—and the fact is that it did not represent the origin cost because all of the costs were not recorded. The well co struction costs weren't recorded. It couldn't be.

Q. You have testified, Mr. Antonelli, that the Hope Compan never recorded or attempted to record any estimate of th original cost of purchased properties at the time of acquisitio isn't that so?

A. I still say that that is so; yes.

Q. Now, you do not then conceive that the Hope Com
6301 pany, when it recorded 1,300,000-odd dollars in its plan accounts in the Clarksburg acquisition, was attempting t record the original cost of the company's property, is tha correct?

A. I say they did not attempt to record the original cost of th property; no, sir.

Q. The $94,000 entry that was made in an account called b the Hope Company, "Property appreciation account," was no in your judgment designed to represent the appreciation in th property above original cost which had been paid for by th Hope Company, is that correct?

A. Yes, sir.

Q. Do you know what the "Property appreciation account" wa supposed to represent?

A. No, sir. I wasn't interested and I didn't have any occasion to find out; no, sir.

Q. Mr. Antonelli, you weren't interested in finding out what that account paid before you testified flatly that the company never attempted to record any estimate of original cost of ac quired properties, is that correct?

A. I still say that it didn't record any estimates——

Q. (Interposing.) No, no, no. Will you please answer th question.

* * *

6302 A. Yes, sir.

By Mr. Slaff:

Q. That is correct?

A. Yes, sir.

Q. In other words you came to a determination of what the company had done or attempted to do on its books, with respect to a particular acquisition, without investigating all the entries that had been made by the company in connection with that acquisition, is that correct?

A. I investigated——

Q. [Interposing.] Now, is that correct or not?

Mr. Slaff. I submit that can be answered categorically.

The Witness. I will answer it with reservation; yes.

By Mr. Slaff:

Q. All right, so now——

Mr. Milde [Interposing]. Wait a minute. Let him state his reservation.

Mr. Slaff. That is just what I am going to get to.

By Mr. Slaff:

Q. With reservations you can say that you can tell us whether the company attempts to record an acquisition at original cost, without investigating all the records made by the company in its books at the time of acquisition. That is correct?

6303 Will you please tell us whether that is correct and then if you want to state the reservation, go ahead?

A. Yes; with reservation, I will say, yes.

Q. Go ahead and tell us what the reservations are?

A. Well, I determined the original cost. I went to every voucher that shows individual items, which were part of the Clarksburg Light & Heat Company, or any other prior utility, and made sure that the actual original cost was really the actual original cost, and not what was on the books, and I am a hundred percent certain that the company never made any estimates in any case. I do not know that the company had made no estimates.

Mr. Milde. Of original cost?

The Witness. Of original cost; yes.

By Mr. Slaff:

Q. And that is your sole reservation?

A. Certainly. I examined every voucher. I examined every item.

Q. That is, you examined everything except all of the accounts of the company?

A. I was interested in individual items. I wasn't interested in the purchased properties as they existed in 1929 or what not. I was interested in the items that existed on December 31, 1938.

Q. That is right.

6304 A. Now, that was a utility. What I had to do, is go to the vouchers and find the actual cost of these properties.

Q. Yes.

A. While I was doing that I was comparing with the books and I am darn sure that the company never made any estimates on original cost.

Q. You can tell us that what the company recorded or attempted to record in its books at the time of acquisition, with respect to original cost, without making a complete examination of the company's books; isn't that so?

Mr. MILDE. I object to that question.

Mr. SLAFF. Well, if it is not so, he will tell me so.

Mr. MILDE. It is a repetition that has been asked at least five times. Mr. Antonelli has stated that he has examined all the books and records and he asked him——

Mr. SLAFF [Interposing]. He stated directly contrary to that, Mr. Milde.

By Mr. SLAFF:

Q. Did you examine the property acquisition account?

A. I examined every voucher, every record, every book that was necessary to examine.

Q. Did you examine the property appreciation account record——

A. [Interposing]. Examined——

Q. [Interposing]. Just a minute. Relax.

6305 (Continuing.) Record, to determine what that purported to be. Didn't you testify just a few minutes ago you did not?

A. I don't think I did, because I got all the costs that it was necessary to get in order to determine the original cost. I can show a voucher for everyone of those costs. That is all that was necessary for me to do. I didn't have to do unnecessary things.

Q. Now, let's get back to the property appreciation account and the record thereof made by the company.

* * *

Q. Now, did you or did you not make an examination of the records in the property appreciation account, to determine what that was supposed to represent at the time it was recorded in the company's books?

A. Personally, I did not.

6306 Q. Now, did any of ——

A. (Interposing.) Excuse me, I haven't finished.

Q. I submit he has finished. That is all I asked him, whether he did or didn't.

A. I was just going to say, somebody else might have done it.

Q. That is the next question I was going to ask you, Mr. Antonelli. You will get it.

A. Excuse me.

Q. Did any of your assistants do that and report to you in respect to that?

A. I don't recall, but I assume that somebody did look at this appreciation item, but I can't recall offhand. There were so many things to remember.

Q. What does "property appreciation" mean, Mr. Antonelli?

A. Well, it is probably an increasing of value or what not.

Q. Well, it means increasing value rather than what not, doesn't it?

A. Well, increasing cost, let's say.

Q. Increasing cost over what?

A. Over some other cost, I don't know.

TRIAL EXAMINER. Over what?

The WITNESS. Over another cost.

TRIAL EXAMINER. The increase of one cost over another

6307 cost?

The WITNESS. Yes.

By Mr. SLAFF:

Q. And the cost that was recorded on the Hope Company books was the book cost on the books of the Clarksburg Company, isn't that so?

A. Yes, sir.

Q. And the depreciation reserve was also picked up, was it not?

A. Yes, sir.

Q. And you are telling us now that you know, now, that, back in '29, when the company recorded those figures on its books, it was not attempting to record on its books the original cost of those properties, is that correct?

A. Oh, yes. I am very certain that they weren't attempting to record the original cost. They were recording the book cost of Clarksburg Light & Heat Company. A hundred percent certain.

Q. And is one of the factors in your determination, the fact that no consideration was given to well construction costs at the time of the acquisition, because it had been the practice of both companies to expense such costs?

A. Yes; it is, because, without having the full costs of these wells, you couldn't get your original cost.

Q. In other words, then, what you are saying is that
6308 the Hope Company, at that time, was not attempting to record on its books what you presently conceive to be original cost, as you have testified to that, is that right?

A. Yes; and what anybody will think original cost is, the full original cost.

Q. Well, let me see if I get you straight, so the record will be clear Mr. Antonelli: The Hope Company did not record on its books, with respect to Clarksburg acquisition, what you presently consider the original cost—right?

A. Yes, sir; that is right.

Q. It did not attempt to record on its books what you presently consider the original cost—that is correct?

A. Yes, sir; that is correct.

Q. Illustrative of that is the fact that it did not record on its books any well construction costs which had been expensed previously by the Clarksburg Company, is that correct?

A. Yes, sir.

Q. Now, do you know whether in 1929 the Hope Company considered original cost to be what you now consider it to be?

A. I don't know what the company's mind was in 1929. I am sure.

Q. That is right. So that you do not know, Mr. Antonelli, whether in 1929 the company attempted to record on its
6309 books what it then considered to be the original cost of acquired properties, isn't that correct?

A. No, sir; because it was very plain it wasn't original cost. didn't include all of the costs. How could it include original cost when you had only part of the costs?

Q. Mr. Antonelli, you know that conceptions of what is original cost differ.

A. There is only one original cost, the full cost.

Q. There is only one original cost and Antonelli is its prophet. Mr. Antonelli, is it not a fact, as demonstrated in this case, that there is difference of opinion as to what represents actual original cost?

Mr. MILDE. Between reasonable men?

Mr. SLAFF. I will add, between reasonable men and men equally competent in the field of engineering and accounting with Mr. Antonelli.

The WITNESS. Well, I can't conceive the idea that if a person paid $2,000 for a well and capitalized $1,000, that $1,000 is the cost of the well. It is $2,000. It is plain thinking.

By Mr. SLAFF:

Q. Now, Mr. Antonelli, we are wasting a lot of time. Now, isn't it a fact, Mr. Antonelli, that there is difference of opinion between equally competent people as to what is original cost?

6310 A. Yes: there is, from a bookkeeping point of view and accounting point of view, yes; but not as to actual cost. It couldn't be anything else but just what you paid for it.

Q. All right. Now, is it not a fact that in 1929, what the Hope Company then conceived or considered to be original cost of property was different from what you today consider to be original cost of that property?

A. My idea is that I don't think the company ever considered that it was original cost. They just set up the book cost. I don't think they talked anything about original cost.

* * *

A. I don't know what the company thought about it.

By Mr. SLAFF:

Q. Then you cannot tell us whether the Hope Company in 1929, or at any date in the past, with respect to acquisition, attempted to record in its books what it then considered to be the original cost of the properties which it was acquiring, is that so?

A. All the investigations that I made shows that the company never attempted to show original cost on their books of the property that they purchased. They showed the purchase price.

6311 Q. Mr. Antonelli, you have testified just now that you don't know what the company considered to be original cost in the past, is that right?

A. The facts show ——

Q. (interposing). Is that or is that not right, have you so testified?

A. Yes, sir; with qualifications.

* * *

Q. Now, then, with respect to acquisitions made in the past, is it not a fact, then, that you cannot tell us whether the company did or did not attempt to record on its books the original cost of those properties acquired as it then considered original cost?

A. My study convinced me that they did not attempt to set up the original cost, and I can prove it to you.

Q. You are in luck, Mr. Antonelli. Your study convinced you that the company did not attempt to set up original cost as you today conceive original cost to be, and to mean, isn't that right?

A. No, sir. I can prove to you that what they set on the books was the purchase price and not the original cost. I am
6312 talking about facts now. I can prove it to you with figures.

Q. We know that purchase price went on the books, Mr. Antonelli, and obviously that is what we are coming to, if you can testify to it, as to whether or not that purchase price did or did not represent original cost. Now, then——

A. (interposing). It was very plain it didn't represent original cost.

Q. It was very plain to you, Mr. Antonelli, that it did not represent original cost, as you now conceive and represent original cost to be, isn't that what you mean to say?

A. It is very plain that what they set on the books is not the actual price that the predecessor paid for it.

Q. Well, let's start again and just see if we can develop this in reasonable sequence, Mr. Antonelli: You have testified, have you not, that you do not know what the Hope Company considered original cost to be?

A. Yes, sir.

Q. At the time of its various acquisitions?

A. Yes, sir.

Q. All right. If you do not know what the Hope Company considered original cost to be at the time of acquisition, now you represent, do you, that you can tell us whether the Hope Company recorded or attempted to record original cost of acquired properties as it then conceived the meaning of the term?

* * *

6315 The WITNESS. No; I can't.

By Mr. SLAFF:

Q. All right. So then all your testimony with respect to whether or not the company recorded on its books or attempted to record on its books the original cost of acquired properties, refers only to original cost of acquired properties as you now conceive original cost, is that right?

A. It refers to the actual original cost. I mean, the amount of money the predecessor paid.

6316 Q. Mr. Antonelli, someone other than you and I will decide what is the actual original cost?

A. Well, I am saying that it refers to what actually somebody paid for the properties and not what was recorded on the books, or what was the purchase price.

Mr. SLAFF. Well, I wonder if the reporter would re-read my question, and I wonder if you would tell me, Mr. Antonelli, if that isn't, in the light of what you have just said, if that isn't a fair statement, as I have put it?

(Whereupon the pending question, as above recorded, was read by the reporter.)

A. Yes; that is right.

By Mr. SLAFF:

Q. All right. Let's for a minute turn to the Flaggy Meadow acquisition. Will you turn to the Fayette County Gas Company acquisition?

A. All right, sir. You mean in Exhibit 98?

Q. Well, just direct your attention to that, and then we will—you may have some papers in connection with that. In your determination of original cost of that property, what did you determine as the value per acre, and cost per acre, of the gas acreage of the company?

A. I used the purchase price, which I think it was $14.50 per acre. I am not certain, but I think that was
6317 $14.50.

Q. And that is the amount which is recorded on the company's books in connection with the acquisition of that property?

A. Of what is left of that property.

Q. Yes, sir. Did you record that amount—did you use that amount as representing the original cost of that gas acreage?

A. Certainly; yes.

Q. I see. As to that, that amount was entered on the company's books as original cost, was it not? The gas acreage in that acquisition.

A. In the case of leases, we set up the original cost—the original cost was the cost of—the purchase cost, put it that way, the purchase cost for leases purchased from other utilities.

6318 Q. Well, so that in that respect, at least, the company, as far as you are concerned, did record on its books the original cost of property acquired from prior utilities?

A. Yes. In this case exception was made, I think in accordance with rulings by the West Virginia Commission. I am not certain, but I had instructions by the company to do so.

Q. And you did the same thing, did you not, with respect to the acquisition from the Flaggy Meadow Gas Company? That is to say, you took as original cost the cost of gas leases, as recorded at the time of acquistion. Is that right?

A. We did this with respect to all of the purchased leases, and I said why we did it. We did it because we had special instructions in the case of leases.

Q. Well, of course you had no qualms about disregarding general instructions in the system of accounts, did you? I am referring specifically to instructions 2-(b).

A. No.

Q. So then you represented to this Commission that the original cost of the leases, if I may sum up—leases of acquired utilities—was the amount that had been recorded at the time of acquisition?

A. Yes, sir.

Q. All right.

A. And I said why.

6319 K. That is right. That represents a recordation by the company, does it not, on its books, of the original cost of that property? That is correct, is it not?

A. Yes, sir.

Q. So that, to that extent, at least, your previous testimony that the company did not record original cost of acquired properties on its books is in error. That is correct, is it not?

A. That is an exception and I say I gave the reason why we did that. We had special instructions.

6320 Q. And in the Fayette County Gas Company purchase, that represents about a third of the purchase price, does it not?

A. You mean now or at the time of the purchase?

Q. At the time of the purchase.

A. I think it was about $200,000.

Q. Out of six?

A. Yes.

Q. Yes; that is right.

A. But we don't have $200,000 now. We don't even have $200,000 left in the entire Fayette County Company. We have only fifty leases.

Q. I understand that. Now, with respect to the Flaggy Meadow acquisition: When was that property constructed?

A. Constructed or acquired?

Q. Constructed?

A. Prior to 1902.

Q. Over what period prior to 1902?

A. Oh, I would say offhand—I don't know—I see a line here, 1895.

Q. When was the bulk of the property constructed, Mr. Antonelli?

A. Well, I can't say offhand. Prior to 1900. I can't guess; I can't say.

6321 Q. That property was acquired in 1902, was it not Mr. Antonelli?

A. That is right.

Q. And isn't it a fact that the bulk of that property had been built in about the five-year period preceding 1902?

A. Something like that.

Q. Yes.

A. But I am not certain.

Q. Certainly.

A. My records show that some wells were drilled in 1895, 1900, 1901.

Q. Surely. Well, I am just talking about the bulk of the property. And the property acquired was recorded in the plant account of the Hope Company at average cost, was it not, Mr. Antonelli?

A. Was recorded at the purchase price.

Q. Was the purchase price spread among the different accounts?

A. Yes, sir.

Q. And was that spread determined by a determination of average cost of the property in each of the accounts, Mr. Antonelli?

A. Yes; they used the current market prices.

6322 Q. We will get to what they used, but it was recorded, was it not ——

A. (Interposing.) It was recorded——

Q. (Interposing and continuing.) As stated in the voucher, at average cost?

A. Yes; average cost determined by Hope; yes.

Q. That is right?

A. Yes.

Q. Now, you say, do you, that that average cost is average cost for the year 1902?

A. That is the average cost for the previous two or three years. I am not certain whether it was two, or three, years. The average current market prices for 1902, 1901, 1900—the previous two or three years.

Q. It couldn't have been the previous three or four years, or anything like that?

A. I can get you the exact figures if you wish. I don't know if it was two years or three years, but it was the previous two or three years.

Q. You say you spot-checked those costs?

A. Certainly I did.

Q. Now, did you have some of your people make that check for you or did you yourself do it or review what was done?

A. I had some people make it for me.

6323 Q. You made no independent study of your own to determine whether average cost meant average cost over the period during which the bulk of the property had been constructed or something else?

A. I instructed ~~to check exactly~~ what the average costs shown on the voucher were, and how they were obtained, and that man did that work and he understood perfectly what I asked him to do.

Q. When you speak of the voucher in that last answer, or the vouchers, are you referring to the Hope Company vouchers or the predecessor company's vouchers?

A. Let me see. I was referring to—I think it is H–45; I will have to check it; or H–48.

Mr. MILDE. Was it the Hope Company voucher or the voucher of a predecessor company?

The WITNESS. It was a Hope Company voucher.

By Mr. SLAFF:

Q. Did you have any vouchers of the Flaggy Meadow Company, which you could consult?

A. I can't recall offhand; no. I had a receiving voucher. No, I don't know; I don't——

Q. (Interposing.) Well, when you testified earlier in the afternoon that you had a voucher for every single cost shown in your original cost, you weren't then referring to acquired properties?

6324 A. I have vouchers for certain companies like Mountain State and Clarksburg Light & Heat, to the predecessors.

Q. But not for all of them?

A. Not for all of them.

Q. To that extent, you do not have vouchers showing the cost of the properties going into the total of the original cost, have you?

A. I have some vouchers but not all of the vouchers. I don't know how much, but I had quite many vouchers of the predecessor companies.

Q. All right. Now, with respect to the Flaggy Meadow acquisition, you are telling us that average cost, at which the over-all cost was spread between the different plant accounts, did not represent average cost over the period during which the bulk of the company's property had been installed; is that correct?

A. That is correct.

Q. And that is based upon, as you have testified, the determination that some of your assistants made in this case?

A. Yes, sir.

Q. Now, there, again, in that case, you have recorded, have you not, $6.00—you have recorded acreage at some $6.01 per acre as representing the original cost of that acreage?

6325 A. I don't have the figure, but I think you are right. I am not certain, but it runs through my mind that it ran about $6.00.

Q. And to that extent you are representing that the Hope Company did record, at the time of the acquisition of that property, the original cost of the gas acreage acquired; is that right?

A. Yes, sir; and I again would like to explain that that was done—that was an exceptional case and it was done under the instructions of the West Virginia Commission, that, in the case of purchased leases, that we should record the purchase price.

Q. By the way, Mr. Antonelli, when you speak of this instruction of the West Virginia Commission, in this qualification you are making, are you speaking of a recent instruction?

A. I don't know how recent the instructions are, but—let me see—well, I suppose I got the instructions a year ago.

Q. Well, that is, instructions which were given to you within the past year or so?

A. Yes.

Q. By the Commission, as to how that matter should be handled; is that right?

A. Well, they were given to me by the company and I
6326 understand that they got it from the Commission.

Q. Well, that, at least, is your understanding of what was represented to you by the Company?

A. Yes.

Q. You made no independent effort to get an instruction or interpretation from the West Virginia Commission in that respect?

A. No, sir. I was instructed that, in the case of the leases, I should use the purchase price, and I think they got the instructions from the West Virginia Commission. However, I am not quite certain.

Q. You testified, did you not, that there was no possibility of duplication of costs, as shown in your Exhibit 60 and 20, and amounts recorded on the Company books; is that correct?

A. What kind of a duplication do you refer to?

Q. Duplication of cost.

A. I know. In properties?

Q. Yes.

A. What?

Q. Yes; in the property account.

A. One item could appear in two accounts; is that what you mean?

Q. Yes, that is right; or in the same account.

A. Oh. I am certain there is no duplication.

6327 Q. Well, suppose a property in the 1920 reclassification of accounts—suppose a property was missed, would that mean that the cost as recorded on the Company's books at that time would also have been missed?

A. I didn't pay any attention to the 1920 reclassification. I just ignored it.

Q. Mr. Antonelli, did you testify, when asked how property exists which does not show on the Company books, didn't you testify that it might be that, during the reclassification of accounts, certain properties were missed and, when asked what reclassifications you meant, you referred to the 1920 and 1932 reclassifications?

A. Yes; certainly.

Q. All right.

A. Well, if they were missed and then we picked them up in the field and found the costs on the books, we restored them. If we didn't find the cost on the books and records, by the way, then I included them under the column, "Direct material and labor not capitalized."

Q. Well those former reclassifications were just that, weren't they—reclassifications of cost on the books?

A. Well, let me tell you what they did in 1920.

Q. All right.

6328 A. They had certain dollars set up on the books. They didn't change the dollars.

Q. That is right.

A. They went out in the field and made a new inventory and set up this inventory and reclassified these dollars they had as of 1920.

Q. That is right, so——

A. (Interposing.) Under one voucher.

Q. Pardon me. Go ahead.

A. M-699. That is an inventory voucher. It doesn't mean anything. What I did, I ignored that voucher. I went back and got the actual cost by first identifying the property——

Q. (Interposing.) Let's not get to what you did. We are still at 1920. We will get down to what you did. I am just asking——

* * *

6329 By Mr. Slaff:

Q. Now, confining ourselves solely to the 1920 reclassification, the dollars on the Company books were spread over an inventory that was then taken; isn't that right, Mr. Antonelli?

A. Yes, sir.

Q. And so all the dollars that had been on the books before the reclassification still remained on the Company's books after the reclassification—that is correct, is it not?

A. All the dollars; yes.

Q. Surely. And when you say certain properties were missed, or might have been missed, what you meant was that, in making the inventory, certain properties might have been omitted from that inventory; isn't that correct?

A. Well, not intentionally.

Q. Of course we are not going into the question of intentio at this time.

A. They were missed, that is all.

6330 Q. And omitted from the inventory?

A. All right, omitted from the recording it on the b.oks.

Q. The dollars were recorded on the Company's books, wer they not?

A. Yes.

Q. All the dollars—right?

A. That is right.

Q. All the property, however, the items of property, might no have been recorded on the Company books; is that correct?

A. That is correct.

Q. Now, when you went out in your present original cos determination and found a property that had been missed i 1920, you determined the original cost of that property, did yo not?

A. Yes.

Q. Now, in those cases, where you could find that some cos of that property had been recorded to another item of property you eliminated that; is that correct?

A. I don't get that last question.

Q. All right. With respect to property that you found i your present inventory, which had been missed in the earlier in ventory, you determined—you made an estimate of the original cost of such property—right?

6331 A. No; I first made—I tried to find the voucher and i many cases I did find the voucher.

Q. Yes.

A. Not the 1920 voucher, but the actual voucher.

Q. That is right.

A. And I put it in.

Q. That is right, and you either determined the cost from voucher or made an estimate of the cost of such property; isn't that right?

A. I put it the other way: For instance, as I tried to say— I was stopped—I didn't pay any attention to the 1920 inventory voucher. I went out in the field.

Q. That is what we are afraid of, Mr. Antonelli.

A. And got the inventory and went back to the original vouchers and got the cost. I just kept that 1920 inventory voucher. It didn't mean anything. So I went back to the actual

cost. If I didn't find the voucher I estimated or put it under the column, "Material and labor," and "Direct material and labor not capitalized," so there couldn't be any duplication and there couldn't be an improper distribution of costs.

Q. Now, do you mean to tell us that you paid no attention whatever to—what is that voucher number? M-69? The adjustment?

6332 A. M-699.

Q. M-699; the 1920 reclassification voucher?

A. That is right.

Q. You paid no attention to that in your original cost determination?

A. No sir. Went right past it.

Q. All right. Now then, going back—Well, included in your total of inventory transferred and correction adjustment, column 6, pages 31 and 32 of Exhibit 20, included in the total of $1,804,000, red figure in that total, isn't there a total of approximately $155,000 which are adjustments of vouchers M-699 and A-155?

A. Where are you getting those figures from?

Q. I am just asking you a question. The figures as they come now, for your convenience, are from Mr. Pace's Exhibit 67-A.

A. I don't know anything about Pace's exhibit.

Q. Don't you know anything about Pace's exhibit?

A. I wouldn't want to explain Pace's exhibit now.

* * *

Q. I am asking, independently of Mr. Pace, whether
6333 you know whether or not there is contained in your Column 6 of Inventory and other adjustments, of your Schedule 1-A adjustments, with respect to voucher M-699.

A. Certainly there is.

Q. Then you did pay some attention to that voucher, Mr. Antonelli?

A. Well, in order to eliminate it, you do have to pay some attention. You make an adjustment to bring—to tie it up with the books.

Q. You told us just a minute ago, Mr. Antonelli—and the reason I inquired specifically here—you told us just a minute ago that you hadn't paid any attention at all to voucher M-699. I was trying to find out what the fact was.

A. I didn't pay any attention, as far as determining the original cost. I had to adjust it out and find the actual cost, and it is only natural. I can't understand what you are driving at.

Mr. MILDE. Well, you paid attention to it, to the extent of disregarding it?

The WITNESS. That is all.

Mr. SLAFF. That, I might observe, of course, is not a finesse with words—no.

Mr. MILDE. Well, it is what you finally brought out by your cross-examination, as I see it.

* * *

6334 By Mr. SLAFF:

Q. Do you consider it proper to increase the cost of the property purchased from an affiliate above the purchase cost; is that right?

A. Well, if I was determining the original cost and the purchase costs from the affiliate wasn't the original cost, naturally I would consider it improper that that is the cost.

Q. As I interpret your last answer, you consider it proper for an affiliate to make a profit on an acquisition; is that right?

A. Profit?

Q. Yes.

A. There is no profit involved here at all. How could there be profit? We are just getting to the original cost.

Q. Where do you propose to show the difference between purchase cost and original cost of those properties acquired from affiliates in the records which you are setting up on the Company's books?

A. That hasn't been decided yet.

6335 Q. Where do you propose to show it?

A. It doesn't make any difference. According to the code of accounts I will put it in 100.5. That is my personal idea.

Q. How do you propose to dispose of it after it is recorded in Account 100.5?

A. No one knows about that.

* * *

Q. What is that?

A. I don't know.

Q. You just don't know; is that right?

A. No. Nobody else does.

* * *

The WITNESS. I have no opinion.

6336 Q. Then you just don't know?

A. No.

Q. Of course you are not, Mr. Antonelli, disputing the fact that, with respect to these prior acquisitions, Hope recorded in its accounts the cost to Hope?

A. In some of the cases, like Clarksburg Light & Heat and Mountain State, they recorded the cost to the vendor, and then showed the difference in the depreciation reserve. In some properties they recorded the purchase price.

Q. The net effect of the Clarksburg and the other acquisition was to show the cost to Hope?

A. Yes.

* * *

6339 Redirect examination by Mr. MILDE:

Q. Mr. Antonelli, you were interrogated as to a 25 percent additional allowance over some Ford, Bacon and Davis unit costs that you used in making certain estimates on structural costs, do you recall that?

A. Yes, sir; I do.

Q. Well, what was the total amount of structural costs that you estimated in your $70,000,000 original cost estimate for items where you used these adjusted unit cost figures?

A. The total amount involved, that total amount of the amount that the Federal Power Commission Examiner excluded from their Exhibit 57, was approximately $100,000.

Q. And those were the only items in this $70,000,000 where you used these unit costs that you were interrogated about?

A. No; those are the dollars that the Federal Power Commission Examiners did not allow us.

Q. They did not allow $110,000 of estimates?

A. That is right.

Q. And those particular unit costs were not used in connection with any other estimates than these?

A. Well, they were used with an additional amount,
6340 about a hundred thousand dollars, which was allowed by the Federal Power Commission.

* * *

Q. Mr. Antonelli, referring to your Exhibit No. 60, let me ask you if the figures that you show for the various accounts are not an explanation or an itemization of the omitted property and costs of the figures appearing in column "H" of Schedule No. 2, of the Federal Power Commission Examiners Exhibit No. 75?

A. Yes, they are.

Q. In other words, taking the first item of $150.45 as shown in column "H" there, as amount disallowed by the Examiners, that is the $150.45 which appears on page 2 of your Exhibit 60?

A. That is correct.

Q. And so on, if we ran through all of these accounts, they would either be exactly or substantially the figures shown in column "H," would they not?

A. The difference would be the property used to transport coke oven gas which are not included in our Exhibit No. 60.

* * *

TRIAL EXAMINER. Ruling was reserved on Exhibits 59,
6341 69, 98, and 99. Was there any objection to those exhibits?

Mr. SLAFF. Well, I have what I might say is perhaps not an objection but something which I think the Examiner should take into consideration in ruling on the exhibit. If this Exhibit 60 is admitted into evidence, I think it should be admitted by the Examiner with the notation at the time of admission that the various headings and statements contained therein are very definitely misleading as they appear in the exhibit.

TRIAL EXAMINER. And as admitted by the witness.

Mr. SLAFF. That is correct. I think the nature of those—of the misleading character of those representations in the exhibit—has, I think, been brought out in the cross-examination of this witness. If the Examiner is to admit this exhibit in evidence, I think it should be done with a statement by the Examiner at the time of such admission so that in the future this exhibit won't stand just by itself in the record, and I do make that observation with respect to the exhibit.

Mr. MILDE. If the Examiner were to state with respect to each exhibit that he thinks this title or that title were misleading, we would never have a record here.

Mr. SLAFF. The reason I say that is because I really think that it is of sufficient consequence in this case so that,
6342 if an objection were pressed on that ground, it might be proper on the part of the Examiner to sustain such an objection.

Nevertheless, what would happen then, I presume, would be that the company would have to re-do the exhibit if it wanted to get it into evidence, and that is a considerable job—what the job might be worth is something else again—but it is a considerable physical job and I don't want to press the objection on that ground for that very reason; but I do think it a reasonable re-

quest to make that some notation be made at the time of admission into evidence of this document, if it is admitted, with respect to the representations made on the face of the exhibit itself in certain parts, and their misleading character in that respect.

TRIAL EXAMINER. Well, that probably would necessitate some little study of the exhibit and the record in order to determine just exactly what misrepresentations do appear in the exhibit, unless counsel has them in mind specifically right now.

Mr. SLAFF. Frankly, what I want to guard against is the fact that this exhibit may sometime be considered by itself without specific reference to that portion of the record where we took up, with Mr. Antonelli, what I, at least, conceive to be very definitely misleading portions of the exhibit, on its face.

Mr. MILDE. Well, may I call the attention of the Ex-
6343 aminer to this, that what Mr. Slaff is afraid of is the very reason—unwarrantedly—is the very reason that I asked Mr. Antonelli on redirect if it wasn't a fact that this Exhibit 60 is an explanation or a list of the omitted costs or omitted property costs of the figures appearing in column "H" of the Commission's Exhibit 65.

Now, you look at that exhibit and there can't possibly be any doubt, for example, that on the land accounts, the ——

Mr. SLAFF. Let me explain what I have in mind.

Mr. MILDE. Let me finish—that on the land accounts the Commission allowed a certain amount of money, as shown by their exhibit, and they have disallowed $150.45, which are the abstracting and recording costs listed in here. These two exhibits, one by the Commission's staff, and one by Mr. Antonelli, tie in together.

One is complementary or supplementary to the other, and there can't be any doubt that what is listed in Exhibit 60 is either the entire omitted cost of a particular structure, or certain portions of the cost.

Mr. SLAFF. Well, now, just take a look. I have before me that exhibit, and it is open to page 4, which is the first page of Account No. 23-2, and it certainly represents that there was excluded in the Federal Power Commission original cost exhibit, obtaining, recording, consideration, and abstracting, costs for every
6344 single one of the leases shown there on the exhibit. That is certainly what that page represents and Mr. Antonelli certainly, under cross examination, stated, that that is not what it was intended to represent by any manner of means.

Mr. MILDE. And I so stated at the time.

Mr. SLAFF. Sure, that is right. Certainly, to anyone who reads that portion of the record, that will be apparent, or one will know about it.

TRIAL EXAMINER. I don't think counsel for the company could complain of a ruling in accordance with the witness' own testimony, with respect to the exhibit.

Mr. MILDE. Oh, no. No, I just didn't want the Examiner to think that we would put anything in here that was intentionally misleading, and I made a statement at the time that we put these costs in here as a general heading, and dittoed them, and if we were doing it again we wouldn't do it that way.

Mr. SLAFF. Sure.

Mr. MILDE. Because, looking at it now, somebody might get a wrong impression.

Mr. SLAFF. I am not going into the motivation now, and the motivation isn't what moves me in making the statement I do, and the suggestion I do. It is simply so that the exhibit, on its face, will be clear, and if somebody goes to the place where
6345 it is received into evidence, if it is, and reads that portion, he will know what the fact is in that respect.

TRIAL EXAMINER. Exhibits 59, 98, and 99 are admitted into evidence.

(The documents referred to were received in evidence as Exhibits 59, 98, and 99.)

TRIAL EXAMINER. Ruling will be reserved on Exhibit 60.

* * *

6686 **TESTIMONY OF F. P. C. WITNESS GOUGH ON HOPE WITNESS' MISINTERPRETATION OF GOUGH'S REBUTTAL OF "TRENDED ORIGINAL COST"**

Transcript Pages 6686–6734

* * *

Mr. SPRINGER. Mr. Examiner, we are presented with an unusual situation, in that the company didn't choose to cross-examine Mr. Gough relative to Exhibit 74 which was his report on Mr. Antonelli's original cost trended, nor to call Mr. Antonelli to the stand to rebut the criticisms or trending of original cost, which Mr. Gough's exhibit is, but the company had Mr. Rhodes testify in that connection.

In his testimony, Mr. Rhodes has said a number of things, in connection both with Mr. Antonelli's Exhibit No. 20 and Mr. Gough's Exhibit No. 74, which are untrue, and I believe that the progress of the case would be expedited if I were to have Mr. Gough take the stand to comment upon several of the answers which Mr. Rhodes gave during the course of his testimony on Wednesday, July 16, 1941, and Mr. Gough will confine himself to Mr. Rhodes' statements, and nothing new is presented here.

6687 TRIAL EXAMINER. Mr. Gough should confine himself to a direct answer to Mr. Rhodes' statements.

Mr. SPRINGER. Yes.

TRIAL EXAMINER. And not bring up any new matter.

Mr. SPRINGER. That is the purpose of presenting Mr. Gough at this time in surrebuttal of Mr. Rhodes rebuttal.

Mr. MILDE. Of course, the proper way to develop any errors in Mr. Rhodes' statement is by cross-examination of Mr. Rhodes.

TRIAL EXAMINER. That is quite true.

Mr. SPRINGER. Of course, I made a statement at the time that I found Mr. Rhodes to be an evasive witness and I am unable to get him to acknowledge misrepresentations that he has made.

Now, my only resort is to bring the man who made the study, Exhibit 74, and let him point out where Mr. Rhodes misquoted

him. We are certainly entitled to that in the course of procedural due process and a fair trial.

Mr. MILDE. I think we are also entitled not to have the counsel for the Commission make an inaccurate statement as to the testimony of one of our witnesses. Just because he doesn't answer what Mr. Springer thinks he ought to answer doesn't make him an evasive witness.

Mr. SPRINGER. That is just my opinion. It doesn't necessarily have to influence the Examiner or you or anybody
6688 else.

TRIAL EXAMINER. Well, of course, in so far as Mr. Rhodes may have misquoted the witness, that might very easily have been developed on cross-examination, but when it comes to an erroneous interpretation of this witness' statement or testimony, I think it is very doubtful that that could be properly developed on cross-examination.

Mr. SPRINGER. That is my point, Mr. Examiner.

TRIAL EXAMINER. Well, go ahead.

VICTOR G. GOUGH, called as a witness, having been previously sworn, resumed the stand, was further examined and testified as follows:

Direct Examination By Mr. SPRINGER:

Q. Mr. Gough, were you present and did you hear the testimony of Mr. Rhodes on Wednesday, relative to Exhibit 74 which is your report on original cost trended, which was originally Mr. Antonelli's Exhibit 20?

A. I was and I did.

Q. Are you prepared to answer certain questions in connection with the testimony that Mr. Rhodes gave?

A. I am.

Q. I refer you to page 6229 of the transcript in which
6689 Mr. Rhodes stated that you developed a trending method to trend the company's original cost. Did you do any such thing?

A. I did not.

Q. What did you do——

Mr. MILDE [interposing]. Just a moment. If we are going to have any reference to Mr. Rhodes' testimony, will you state it accurately in the record by reading it?

Mr. SPRINGER. Do you have page 6229 before you, Mr. Milde? Do you have it before you?

Mr. MILDE. Yes; I have a copy of it.

Mr. SPRINGER. Don't you see that Mr. Rhodes stated that he thought Mr. Gough developed a trending method to trend the company's original cost. That is obvious, isn't it?

Mr. MILDE. This is the direct statement. It begins at page 6228 of the record.

Question to Mr. Rhodes: "Mr. Rhodes, are you familiar with the methods used by Mr. Antonelli in determining his trended original costs in Exhibit 20?

"Answer. I am.

"Question. Have you also studied the trending methods suggested by Mr. Gough of the Commission's Staff in Exhibit 74?

"Answer. Yes.

"Question. Will you compare these two methods,
6690 generally?

"Answer. Mr. Antonelli's methods express original cost in 1938 dollars and Mr. Gough's methods, if carried to completion would reflect, in addition, 1938 construction conditions and methods."

Mr. SPRINGER. Well, what else can that mean except that Mr. Rhodes stated Mr. Gough developed a trending method to trend the company's original cost?

TRIAL EXAMINER. I think it would be well to develop this witness's testimony on the basis of what was said. If it is a matter of interpretation, everybody makes his own interpretation and I don't know where we are going to end up.

Mr. SPRINGER. All right.

By Mr. SPRINGER:

Q. On the basis of the statement read from the transcript by Mr. Milde, what is your answer to Mr. Rhodes comment?

A. What I did was to examine Mr. Antonelli's trending and by tests found that it had not taken into account the improvement in labor productivity per man-hour and, in one major instance at least, that the trending factors for material costs were based upon data not representative of the charges to which they were applied.

Mr. MILDE. I move that that answer be stricken as not responsive to the question or the line of direct examination. He is
6691 supposed to state some inaccuracy in what Mr. Rhodes said about his methods.

Now he is going on to repeat his direct testimony as appearing in Exhibit 74 as I understand it.

The WITNESS. Mr. Examiner, at page 6229, the phrase "Mr. Gough's methods" appears 4 times, both from the mouth of Mr. Rhodes and from the mouth of counsel, and I developed no method for trending original cost.

Mr. MILDE. All right, that is your statement. That is sufficient.

By Mr. SPRINGER:

Q. Now, Mr. Gough, I call your attention to the statement of Mr. Rhodes on page 6230, and I quote: "First he assumes that all the improvements in effective labor productivity were due to methods of construction." Did you assume any such thing?

A. I did not.

Q. What did you do?

A. Using Mr. Antonelli's revised original cost and his labor rates I developed the fact that there has been an improvement in labor productivity per man-hour and that this impeached Mr. Antonelli's trending.

Q. Was it necessary for you to determine the reason for the general improvement in labor productivity?

A. No. A demonstration of the fact that there had been such an improvement was sufficient for my purpose.

6692 I might add, however, that aside from the peculiarities that relate to any single construction job, there are two general factors which tend to improve labor productivity per man-hour. They are (1) more efficient methods of construction——

Mr. MILDE (interposing). I object. Let me interrupt you. I object to the qualifications of this witness to answer that question from here on. He is purely an accountant. He is not an engineer and he is going on in answer to Mr. Springer's question.

Mr. SPRINGER. Just a minute. He made an analysis of the company's experience and, if anything, found that there was an improvement in productivity per man-hour of the company's own man power, when hours were shorter under modern conditions, and the technology of the machine age was at the disposal of the man power of the Hope Company in modern times.

TRIAL EXAMINER. Go ahead, finish your answer.

The WITNESS (continuing). And (2) shorter hours of labor. The displacement of the ox, which was referred to as a means of hauling pipe earlier in this case, by the automobile obviously speeds up construction. The shortening of the work week from 72 hours to 40 hours also makes the hour of work a more productive one, for long hours of labor go hand-in-hand with low productivity.

6693 By Mr. SPRINGER:

Q. Didn't you just make a statistical study of the Hope Company's experience on labor productivity?

A. I did.

Q. That doesn't require any engineering knowledge, does it?

A. Well the thing that Mr. Milde objected to, that more efficient methods of construction improved productivity, is the objection to a platitude, you might say.

Q. That is common knowledge——

A. (interposing.) Because it is obvious that if you are more efficient, that is what efficiency is.

Q. At the same page——

Mr. MILDE (interposing). Which page?

Mr. SPRINGER. 6230.

(Continuing.) Mr. Rhodes says that Mr. Antonelli developed his pipe price trends from actual purchases of pipe by the company over the years?

Did you find this to be true?

The WITNESS. I found that in addition to using actual prices he also used estimates where no purchases of a particular size were made. For example, from 1915 to 1938, I understand—and I believe it is in this record—that there were no purchases of 2-inch pipe and that an estimate was used.

6694 By Mr. SPRINGER.

Q. Now, at page 6231 of the transcript Mr. Rhodes states that you "based your study on book cost, calling it original cost." What did you do?

A. I based my study chiefly on Mr. Antonelli's revised original cost. I did this for the reason that it was Mr. Antonelli's figures I was testing and the best test of the accuracy of his method was to use his own figures for that purpose.

Q. Now on page 6232 of the transcript Mr. Rhodes compares your figure of $2.80 per foot to trend in 1938 with his reproduction cost of $2.84. Was Exhibit 74 made for the purpose of exposing fallacies which might lie in Mr. Rhodes' reproduction cost new?

A. No, it was not. My task in that exhibit was to demonstrate the unreasonableness of Mr. Antonelli's trended results. That was the fly in the ointment that we were fishing for, and when one hauls it out and examines it, he finds that Mr. Antonelli trended well construction to $34,384,320—or to $4.30 per foot. This result

is obtained by using Mr. Rhodes' own figures of approximately 8,000,000 feet of aggregate depth of all wells. It is to be noticed that Mr. Antonelli's figure is a little over 50 per cent higher than Mr. Rhodes' figure of $2.84

6695 Q. In Mr. Rhodes testimony on the same page 6232 of the transcript, he compares your figure with his, apparently as a means of confirming his figure. Are your figures properly used for that purpose?

A. No, they are not.

Q. Why not?

A. My tests of Mr. Antonelli's trending did not extend to the reasonableness of his 1938 prices. In other words, I accepted them. Had I been critical of them, my first complaint would have been that they, assertedly based on company prices for 1938, represent a very small part of total plant. Page 98 of Exhibit 20 shows 1938 additions to plant to be $860,725 of total plant of $70,553,439, a ratio of about 1.2 per cent. Obviously, therefore, these prices which I accepted for the purpose of my exhibit are not properly usable as reproduction cost new prices, for it is apparent that prices representative of a little more than one per cent of the plant are no indication of what prices would be were the entire plant to be reproduced in 1938.

Q. Now, on page 6232 of the transcript Mr. Rhodes states also that you selected lines for the purpose of table 13, and that it is a partial list of lines. Is that a correct statement?

A. No. Page 35 of Exhibit 74 states what it represents. The analysis contains the cost of every job in the company's
6696 mains lines inventory ledger with the exception of those for which data could not be readily interpreted.

The jobs analyzed represent more than 3,000,000 feet of main and $3,000,000 of cost. This is a sizeable portion of all the company's mains construction costs which on December 31, 1938, according to Exhibit 20, were $5,266,108. Of course, the costs by lines jump up and down probably because of construction conditions, such as weather, terrain, and size of job. For this reason the over-all picture is better to be seen from table 14 which summarizes the averages for each size and period.

Q. And when you speak of table 14 do you mean Exhibit 74?

A. Table 14 of Exhibit 74.

Q. Mr. Rhodes testified on pages 6234 to 6235 of the transcript about conditions encountered in building pipe lines. What

have you to say about his comment in reference to your exhibit on that?

A. As I stated in the text of my report, and as Mr. Rhodes observes, it is hazardous to make comparisons of the cost of one pipe line with another. The construction of a pipe line is often surrounded by circumstances peculiar to it and perhaps almost every pipe line may be called a typical in some respect or other.

For this reason it is desirable to analyze large amounts of
6697 construction costs representing many feet of pipe and that has been done as table 14 indicates.

Q. Of your Exhibit 74?

A. Of Exhibit 74.

We believe the percentages of increase of production per man-hour shown on that table definitely indicate a tendency towards improved labor effectiveness.

Q. Now, Mr. Rhodes combined labor study of mains construction jobs to get an over-all figure. Why did you not combine your labor study of mains construction jobs to get an over-all figure in the manner that he did?

A. It would have complicated the method of my comparison and would have introduced a controversial point. My comparison has the advantage of showing like size compared to like size without raising any question as to the validity of a formula, and furthermore when the results by sizes are all examined it will be seen that they tend to confirm one another.

Q. At page 6238 of the transcript, Mr. Rhodes explains calculations he has made on an "inch-feet per man-hour" basis. Did you have the opportunity to check them?

A. No, I did not. I expected to go on yesterday and the papers were made available to me the day before at an hour and on conditions that didn't permit me time to examine them.

Q. Now, at page 6241 of the transcript, Mr. Rhodes states that he used the same wage rates that you used to find
6698 year by year the total man-hours required. Did you develop these wage rates to which he refers or did Mr. Antonelli develop them?

A. They are Mr. Antonelli's.

Q. On page 6242 of the transcript, Mr. Rhodes states "so that trending original cost, as Mr. Antonelli had done, in the light of an unchanging labor performance, really arrives effectively at the contract price in the field." Did Mr. Antonelli pay any

attention whatever to labor performance in the development of his trend factors?

A. No; he did not.

Q. At page 6242 of the transcript and 6243, Mr. Rhodes states that table 11 of your exhibit 74 is not a complete list. Is his statement true or untrue?

A. It is untrue. The amounts of $580,155.05 and $719,878.09 shown on pages 31 and 32 respectively of Exhibit 74 are exactly what they purport to be, namely an analysis of Mr. Antonelli's entire original cost revised for the years indicated, exclusive of overheads. Table 10 of Exhibit 74 shows these amounts with overheads added and they agree to the penny with Mr. Antonelli's original cost as shown on page 82 of his Exhibit 20. The difference between Exhibit 11 and 13——

Mr. MILDE (interposing). Do you mean table 11?

The WITNESS. Table 11.

6699 A. (Continuing.) and table 13, which Mr. Rhodes talked about is readily explainable.

The WITNESS. He raised a question as to these two tables not agreeing.

Mr. MILDE. Well, I think we ought to be fair to Mr. Rhodes and have his complete statement in the record. What it says is that these lists are not complete because of the omission of several sizes of pipe. One table omits some sizes and the other table includes them.

The WITNESS. Well, I can clear that up very readily.

Mr. MILDE. You don't deny that that is a fact, do you?

The WITNESS. Yes; I do deny it.

Mr. MILDE. That one of your tables omits some sizes and the other one includes them?

The WITNESS. Well, I do not deny that they are in one table and they are not in another, but when you use the colorful "omits" in it, I can't agree with you, because when you consider what I am doing, I don't omit anything. I have taken the company's records as they are and there is a very good explanation for the difference. The difference between table 11 and 13 which Mr. Rhodes talked about is not due to an error as Mr. Rhodes seems to imply. Exhibit 11 is an analysis of the mains

6700 construction existing in plant on December 31, 1938——

By Mr. SPRINGER:

Q. You mean table 11?

A. Table 11. (Continuing.) Whereas table 13 is a tabulation of the construction that the company has undertaken, whether retired or not. Obviously, if the 325,000 feet which Mr. Rhodes refers to at page 6243 is not in the plant as of December 31, 1938, it has been abandoned or otherwise disposed of, or Mr. Antonelli's records from which I took the data is in error.

Q. Does this explanation also apply to Mr. Rhodes observation concerning 162,000 feet of 12-inch pipe?

A. It does.

Q. On the transcript page 6243?

A. Yes, sir; it does.

Q. So that the lack of coordination, which he complains about, arises from the fact that you have presented a full picture, namely, a comparison of construction costs in the plant existing at December 31, 1938, and also a comparison of costs whether still existing in plant or not?

A. It does, and it is improperly called a "lack of coordination."

Q. Then it does not indicate that you have made elective choices?

A. Positively not.

6701 Q. At page 6244 of the transcript, Mr. Rhodes refers to your comparisons as "an inadequate sample." Did you sample the company's mains construction cost or did you present the complete analysis of those costs?

A. I presented as complete an analysis as possible for the three important sizes chosen for my study. It represents more than 50 percent of all the mains construction that the company has ever made.

Q. The analysis presented in your table 11 of Exhibit 74, represents how many feet of 10-, 12-, and 20-inch construction?

A. 3,294,595 feet.

* * *

By Mr. SPRINGER:

Q. Will you turn now to the page 78 of your Exhibit 74, which is a copy of a schedule taken from the company's financial statement of December 1938, and which shows the number of feet of main lines pipe by dimensions as of December 31, 1938, and will you add the number of feet of 10, 12, and 20-inch pipe shown on that schedule, and tell me the total number of feet of those three sizes?

A. 3,459,646 feet.

Q. Do you know the total amount of mains' construction abandoned and retired?

A. I am told by Mr. Dunn that it is less than $1,000,000.

Q. So that your tabulation in table 13 of Exhibit 74
6702 can not properly be called an inadequate sample?

A. I think not. I might add that that $1,000,000 I referred to is all of the mains that have ever been abandoned by the company.

Q. At page 6246 of the transcript, Mr. Rhodes states that you applied a general over-all trend to individual purchases of pipe. Is this your method or Mr. Antonelli's method?

A. It is Mr. Antonelli's method. He applied a general over-all trend to pipe and for the purpose of disproving his answer I obviously had to follow in his footsteps. It is true that such an application to an individual purchase might be misleading, but when every purchase to the number of 61, with the exception of only one, which was a distress sale of pipe, gives the same answer, namely, that Antonelli's prices exceed Rhodes' prices, only one conclusion can be drawn.

Q. Mr. Rhodes also stated that your individual purchases are not a good criterion and that you should have taken a cross-section of all the purchases. What did you do?

A. Information for all important purchases of pipe greater than eight inches in diameter which could be obtained in the aggregate amount of $7,808,500, in shown in table 16 of Exhibit 74.

Mr. MILDE. What page?

6703 The WITNESS. 47 and 48.

By Mr. SPRINGER:

Q. Of Exhibit 74?

A. Yes. Pipe greater than eight-inch pipe was taken because it was the trending of the larger sizes specifically that was being tested. When it is recalled that the original cost of all pipe that the company has ever had in its Mains Equipment Account, of all sizes, is, at the outside, using Mr. Antonelli's figures, not much greater than $11,000,000, the term "individual purchase," as applied to $7,808,500 worth of pipe, is a misstatement.

Q. Again at page 6246 of the transcript, Mr. Rhodes states that "Mr. Antonelli investigated all the purchases made by Hope over the years and developed from the actual prices paid the cost over the years." Did Mr. Antonelli use the costs of

pipe greater than eight inches in diameter in developing his trend?

A. He did not.

Q. And what part of the Mains Equipment account, as it existed at December 31, 1938, consisted of mains greater than eight inches in diameter?

A. About 95 per cent of it.

Q. So that Mr. Antonelli's pipe cost trend was developed from costs of pipe of sizes which in money amounted to only about 5 per cent of the account as of December 31, 1938?

6704 A. That is correct.

Q. At page 6247 of the transcript, Mr. Rhodes testified that "the reproduction cost new price of pipe is approximately 20 percent lower than Mr. Antonelli's trended prices." True or false?

A. False.

* * *

A. Pages 47 and 48 of Exhibit 74 show percentages of the excess of Mr. Antonelli's pipe cost as trended over Mr. Rhodes' pipe cost far in excess of 20 percent, and these excesses were developed by comparison with the pipe prices in Rhodes' appraisal before deducting 10 percent for quantity purchases.

If you add to these percentages the 10 percent quantity reductions which are not taken into account in Exhibit 74, there are only five purchases out of the 61 that are less than 20 percent. Most of them run very much higher than 20 percent, as a glance at column "L" of table 16 shows. The highest is 73 percent in excess of Rhodes and others are similarly high.

Q. The prices which appear in column "J" of table 16, on pages 47 and 48 of your Exhibit 74—is that right?

A. Yes, sir.

6705 Q. (Continuing.) Were taken from what source?

A. They are the unit costs per foot for material taken from pages 260 and 261 of table 16, part "D"——

Q. (Interposing.) You mean Exhibit 16?

A. Exhibit 16, part "D" which is Mr. Rhodes' reproduction cost new of the company's property as of December 31, 1938.

Q. And after Mr. Rhodes had applied these prices to the quantities of pipe for each size in his appraisal he made an over-all deduction of 10 percent for wholesale purchases, did he not?

A. He did, and that is shown on page 259 on Exhibit 16, part "D."

Q. But the prices shown in column "J" of table 16 at pages 47 and 48 of Exhibit 74 are ten percent higher than they would be if Mr. Rhodes' ten percent reductions were taken into account?

A. They are ten percent lower than they would be if Mr. Rhodes' ten percent had been taken into account.

Mr. SPRINGER. Will you read the question.

(Whereupon, the pending question, as above recorded, was read by the reporter.)

A. I heard your question, and they should be ten percent—they are, as they stand, ten percent lower than they would be.
6706 Oh, excuse me. The prices. The prices are higher. That is correct. I misspoke myself.

Q. Well, doesn't it follow that, if Mr. Rhodes took an over-all ten percent deduction on the prices——

A. (Interposing.) Afterwards.

Q. (Continuing.) Afterwards, that the prices that were used for your study of trended original cost are ten percent higher?

A. That is correct. I misspoke myself.

Q. At the foot of page 6247 of the transcript, Mr. Rhodes, in commenting upon Exhibit 74, states that "the other explanation is that, in reproduction cost new, I took a lump sum over-all ten percent discount below the manufacturers' quotations, less usual discounts, so that we would expect pipe trends based on actual cost to be higher than reproduction costs on a similar basis——"

Mr. MILDE. Well, why don't you finish the sentence?

Mr. SPRINGER. "Namely, without overheads, and such proves to be the case."

By Mr. SPRINGER:

Q. Is this a true explanation of the percentages of difference which appear in column "L" of table 16 of Exhibit 74?

A. No. It is not, for the reasons that I have just given.

Q. At page 6248 of the transcript Mr. Rhodes said, "Now
6707 some of the items listed in Mr. Gough's tables show a greater than 20 percent and some show practically no difference at all, but they all wash out to approximately the 20 percent difference which I have just described, by comparison with the over-all figures." What do you have to say of this explanation of the difference?

A. It is a false explanation of the definition of what the comparison shown in table 16 of Exhibit 74 indicates. This can be seen by a casual examination of column "L" of table 16 of Exhibit

74 especially if the additional ten per cent on quantity purchases is kept in mind.

Q. Does that conclude your comments upon the statements made by Mr. Rhodes or the interpretations made by Mr. Rhodes of your Exhibit 74?

A. Yes, sir; it does.

Mr. SPRINGER. That is all.

* * *

Cross-examination by Mr. MILDE:

Q. Mr. Gough, referring to your last statement, you don't quarrel with Mr. Rhodes' figures, do you, that if you take the columns "K" and "L," I believe on table 16, that if you add up all the figures and compare the lump sum differences, that the
6708 prices, as you show them for Mr. Antonelli and Mr. Rhodes are approximately 20 per cent difference. You don't quarrel with his mathematics on that, do you?

A. No; I am not quarreling with the mathematics of that.

Q. Did you make that calculation?

A. No; I did not.

Q. I see. Your comment isn't based on the mathematics of it, but on some other things that you expressed in your direct testimony?

A. Yes. It is based also on another comparison that I made of the Rhodes prices for 2, 3, 4, 6, and 8 inch pipe which was used as the basis of his trending, as compared with Antonelli's prices for 1938, and that difference was 14 per cent. If you added to that 14 per cent the 10 per cent over-all quantity discount, you get 24 per cent which would be something higher than Mr. Rhodes.

Q. Well, you recognize that Mr. Rhodes' reproduction cost new prices as he used them are substantially below the prices actually paid by the company in 1938?

A. Well, I haven't made any examination of Mr. Rhodes' reproduction cost appraisal. I wouldn't care to comment on it one way or the other.

Q. Well, you made a sufficient examination to develop your table 16 that you have been talking about, haven't you?

6709 A. Maybe I misunderstood your statement. I thought it led to comment by me on Mr. Rhodes' reproduction cost appraisal. May I have the question?

* * *

(Whereupon, the pending question, as above recorded, was read by the reporter.)

A. I couldn't answer that, because I haven't compared them. His prices were below the prices used by Antonelli for these low sizes of pipe. I stated that and, of course, Antonelli's prices included, at least for the 2-inch, an estimate.

By Mr. MILDE:

Q. For 1938?

A. I think so; yes. I don't think the company purchased any 2-inch pipe in '38 or for a number of years prior to that.

Q. Well, do you know what prices Mr. Antonelli used for his 1938 prices in making his trending?

A. Yes; he used 2, 3, 4, 6, and 8-inch pipe.

Q. I mean, what prices they were?

A. For what period and whose prices?

Q. Yes.

A. They were the prices that the company paid.

Q. They were the prices that the company actually paid
6710 in 1938—that is, the average for 1938 purchases—were they not?

A. Yes. If they paid such—if they made such purchases. Now ——

Q. (Interposing.) Well, I think you have answered my question.

A. I am looking at a table that gives these 2-inch pipe prices and it is a very bad reproduction, that I referred to when I introduced the exhibit, and now I am having trouble with it because I am looking at page 75 ——

Mr. SPRINGER. (interposing). Of Exhibit 74?

The WITNESS (continuing). Of Exhibit 74 and I can't distinguish whether his indication is that that is an estimated price or not.

By Mr. MILDE:

Q. Well, there is no note opposite it indicating that it was either obtained from the Peoples Company, or was a trended cost, is there?

A. Well, there is a narrow line running down there. It doesn't seem to include '38 but I wouldn't be sure of it.

Q. Now, with reference to your comments about selection of lines, Mr. Gough, which of your tables on line construction is the most comprehensive?

A. Tables 13 and 14, which are really to be taken
6711 together, is more—includes more pipe line construction than table 11.

Q. Tables 13 and 14?

A. Yes, sir.

Q. Now, turning to table 14, will you tell me why you omitted 16-inch pipe from this comparison or determination, or whatever you call it?

A. Yes. Let me say this first, Mr. Milde, that every test that I made in this study I have included—that is, I haven't made tests which I excluded. When I made the study I was assigned to the study singly. I had no help. I was fortunate in getting assistance of a couple of the men at Clarksburg in their off time from their regular jobs, and I was faced with the difficulty of trying to get an over-all view of this picture without a tremendous amount of detailed work, so that I chose three sizes, and I chose sizes that I thought would be representative.

Q. Well, Mr. Gough, do you know that there is a very substantial amount of 16-inch pipe in the company's inventory?

A. Yes; there is.

Q. And you didn't in this comparison, use any 8-inch pipe, did you?

A. No; I used only 3 sizes out of a number of sizes.

Q. Well, is there more difference between the installation
6712 of 10 and 12-inch pipe than there is between 8 and 12 or 16 and 20?

A. No; I can hasten to say that if I had had time to make the entire study, it would have been more satisfactory than picking out three sizes. I was faced, as I say, with the problem of doing this work with the resources at my disposal and at the same time trying to get an answer that would be fair, and I feel that I accomplished that.

Q. Well, why did you start with 1905?

A. That was the first year that we had any record of those sizes. We took the books from the very beginning, 1898, and we listed every job that we could, and that was the first year that we got that—that one of those sizes appeared.

Q. And I suppose the reason that you eliminated H–1, which was the first line built by the Hope Company in 1899, was because that was 10-inch rather than one of these sizes that you selected?

A. It was 10-inch, you say?

Q. Ten inch; yes, sir. 10¾ inch, O. D.

A. I don't think we would have eliminated it for that reason, Mr. Milde. I just can't, at this late time—unfortunately, Mr. Whitney, who helped me with the details is no longer here. I just can't tell you why we didn't accept that, whether the details weren't available in sufficiently good shape or what the reason was.

Q. Well, perhaps that was because it was installed in
6713 1899 rather than in 1905?

A. Oh, no. We started from the very beginning.

Q. I see. Well, then, can you tell me now why you omitted lines H–2 and H–8, both 12-inch pipe and totalling some 150,000 feet, H–2 being installed in 1905 and H–8 in 1904?

A. The reasons must have been that the detailed information on those jobs was not in such form that we could use it.

Q. Well; you don't really know about that, do you?

A. Well, I know that we took everything. You are asking me now—that job was done a long while ago and the man who worked on that particular detail is not here, but I am sure that is the reason.

Q. Well, you don't deny Mr. Rhodes' statement that all sizes and all lines have not been studied in your exhibit or analyzed in your exhibit?

A. Oh, no; there is no question about that.

Q. Before we go on I wish you would explain your statement that you didn't have time to examine Mr. Rhodes' working papers. Is that what you meant?

A. Yes. Well, it is simply this: that when Mr. Rhodes left the stand the other day, I had those papers for about an hour I had to go upstairs and didn't have the opportunity to reach them.

Q. Well you know we had them here for you the next day?

6714 A. Well, I will tell you the whole story and that will finish it.

Q. Now——

A. (Interposing.) Well, let me tell you the whole story.

Q. All I am interested in knowing is: you don't say we didn't give you an adequate opportunity to check over those figures?

A. That is exactly what I do say.

Q. All right, then, you better tell your whole story.

A. At 4:30 one of his assistants appeared at my office and asked me for the papers so that I didn't have them that evening.

Q. How long had you had them that day?

A. About one hour.

Q. And how many papers were there?

A. There weren't many, but I had other things to do when I left the hearing room.

Q. So you had them an hour and you didn't look at them?

A. That is right.

Q. All right, proceed.

A. The next day I sent one of my assistants down here in the morning and they were not here—they were over at the
6715 hotel—and he accompanied Mr. Rhodes over to the hotel and Mr. Rhodes declined to give him the papers, and they appeared with the papers at my office, I think, about a quarter to two, and they wouldn't leave the papers there. They wanted to give us copies of them. Well I just—by the time copies were made, or they copied them, I wouldn't have had time to prepare myself to go on the stand—as I thought, the next morning, which was yesterday—and so I simply didn't choose to delve into the matter at all, rather than look at them hastily.

Q. And the fact is that we offered to make copies for you, isn't it?

A. At a quarter to two.

Q. When?

A. On Thursday.

Q. On Thursday?

A. Yes.

Q. And today is what?

A. Today is Saturday.

Q. Now, Mr. Gough, you made some comments about productivity. Are you an engineer?

A. No, sir.

Q. Have you ever constructed a pipe line?

A. No, sir.

Q. Have you ever done any construction work?

A. No, sir.

6716 Q. And is it your view that there is more or less lost motion, so far as man-hours of labor are concerned, under present working conditions, when you knock off after 8 hours, rather than the old days when you worked ten and twelve hours steadily.

* * *

A. I think that the man who works long hours in employment does less because, for several reasons—does less per man-hour—he is more susceptible to illness and the time that he is ill is unproductive time. He has to be excused more often because his free time is frequently not sufficient for his personal needs, and, obviously, he is subject to greater fatigue, and that is cumulative because the long hours give him less time to——

By Mr. MILDE:

Q. (Interposing.) For recreation?

A. No. To refresh himself. Because if he goes out and has recreation, he is liable to do less than if he didn't.

Q. And is that all?

A. Well, that is one of the features of the long day.

Q. I see. And that is what you based your opinion on in this case?

6717 A. Well, I wouldn't say that I based my—I think my opinion in the matter is immaterial. The facts speak for themselves. I was interested in looking up the problem of productivity and I think it is one of the amazing things of our age, that in the last 15 or 20 years there has been the tremendous increase in productivity in practically every industry.

Q. Now, Mr. Gough, what study have you made of the laborers down in the hills of West Virginia? Do you think they are more or less healthy and get time off if they work 10 or 12 hours a day rather than 8 hours?

* * *

Mr. SPRINGER. Mr. Gough said that he studied the company experience on labor performance and Mr. Milde has not kept within the scope of his examination, but he listed an opinion of Mr. Gough's, which he happens to have based upon

6718 his studies of the phenomenon of greater labor productivity under shorter hours and modern working conditions than in the earlier part of this century.

Mr. MILDE. Of course, if Mr. Rhodes developed the results that Mr. Gough achieved, it would not show that you get greater productivity in West Virginia.

I want to develop the basis for Mr. Gough's opinion as to why there should be greater productivity. Not in some garment factory in New York or in some tooth paste manufacturer in New Jersey, but the men working down in West Virginia.

That is what we are concerned with here. I want to know and I am entitled to ask him whether he has made the slightest

study of these conditions as he has described them, as applied to the West Virginians who actually work in these pipe lines.

Mr. SPRINGER. The point is that he took the company's actual experience. Can't we confine our examination to that?

* * *

6719 Mr. MILDE. Is there an unanswered question on the record?

(Whereupon the pending question, as above recorded, was read by the reporter.)

TRIAL EXAMINER. As I understand, this witness testimony and his exhibit are confined to man-hour productivity, as shown by the books of the company.

The WITNESS. [Nodding.]

TRIAL EXAMINER. But based on his opinion as to the productivity of labor in that immediate territory or in any other parts of the United States?

Mr. MILDE. Well, as I understood it, on Mr. Springer's direct examination, he ventured some opinions that of course it was a mere platitude that labor is now more productive than it was in the earlier days, and that is what I am examining him about.

TRIAL EXAMINER. Are the conclusions he arrives at in his exhibits based, to any extent, on that opinion?

The WITNESS. No: they are not based on opinion: they are based on the facts as recorded in the Company's books and in Mr. Antonelli's studies.

By Mr. MILDE:

Q. As you interpret them?

A. Well, it is an interpretation like 12 divided by 3 is 4. That is the kind of interpretation it is.

6720 Mr. REEDER. Mr. Examiner, I submit that the question which counsel asked this witness on cross-examination, having gone outside the scope of the direct testimony, calling for an opinion, which was primarily an engineering opinion, counsel is bound by the answer of the witness and not entitled to cross-examine him further about it. He made him, for this purpose, his own witness, and he can't cross-examine him, and he has no right to be surprised by the answer that he got.

TRIAL EXAMINER. Objection sustained.

By Mr. MILDE:

Q. Well, Mr. Gough, you didn't test the results of your figures, as you show them in your Exhibit 74, as to man-hour produc-

tivity, by any engineering study or analysis or industrial study of labor conditions in West Virginia, as they are applicable to the building of pipe lines from 1898 on?

A. No; I did not. I used only the facts as they relate to the Hope Company.

Q. And just what did you mean by man-hour productivity? Isn't it a fact that that is a computed figure?

A. It is the result of a computation: yes. You take the units of work that are done, the cost of doing that work, the number of hours spent in doing the work, and out of those facts you get the productivity.

6721 Q. Well, you didn't actually ascertain the hours that were spend in doing the work, did you?

A. I ascertained the hours that were spend doing the work, pursuant to Mr. Antonelli's formula, which is this: If you spend a hundred dollars for labor and you pay men on an average 25 cents an hour, it is self-evident that you have gotten 400 hours of labor for that hundred dollars.

Q. Well, will you point to any place in Mr. Antonelli's exhibit where he used a formula of that sort?

A. Well, his whole trending is shot through with that. That is the way the labor is trended. He takes the money and he says that the average rate at which that money was spent was 25 cents or 50 cents an hour, whatever it is.

Q. Well, he never determined the hours of labor for various lines in the—over the course of the Company's history?

A. He didn't do it for various lines. He did it over all by years for each account.

Q. Do you mean to say that anywhere in his exhibit or in his working papers he determined the hours of labor expended in constructing the Company's property?

A. No. If I gave that impression, I am mistaken. Mr. Antonelli wasn't interested in hours, but it follows that if he says the labor rate for so much money was such a rate, there

6722 can be no other answer than that that represents so many hours of labor.

Q. Mr. Gough, will you turn to Page 31 of your exhibit and take your first item of 10-inch line in 1911, installed in 1911, where the original cost, exclusive of overheads, is shown as $8,106? Then, isn't this what you did: You took the average hourly wage rate of 21.9 cents, as shown in your Column E, and divided that into the $8,000 to get man-hours expended?

A. That is exactly what I did.

Q. And that doesn't indicate how many hours of labor were actually required to build that line, does it?

A. No. It is not an actual figure. It is a derived figure.

Q. And you don't know whether it took actually 16,000 hours or 40,000 hours?

A. No.

Q. That is just the computation to get some sort of a factor?

A. Yes; it is a computation like Mr. Antonelli's original cost trended is a computation, and it doesn't violate any of the assumptions that Mr. Antonelli has made.

Q. And nowhere in your exhibit do you actually show how many hours of actual labor it took to install any of the Company's lines, either early in its history or late in its history, do you?

6723 A. No; except as derived by this formula.

Q. And if you wanted some completely accurate data as to how much work a West Virginian pipe-liner could do in 1938, as compared with what his father did in 1910, you would have to make some time studies, wouldn't you?

A. You mean—well, that is on the assumption that the Company book costs are not correct, or that the rates that Mr. Antonelli used are not correct?

Q. Not at all.

A. Well, no, I think that the best indication, assuming that Mr. Antonelli's costs are correct, and that his labor rates are correct, if you divide his cost by his labor rate, you will get the number of hours expended. Otherwise he has got a mistake somewhere.

Q. Yes; but you don't get the hours expended, Mr. Gough; you just admitted that. You don't know whether those are the actual hours of labor expended or not?

A. No; I didn't say they were the actual hours expended. I say, you get the hours as I have shown them by that method. Now, if Mr. Antonelli's original cost is wrong, or if his labor rate is wrong, then the answer is wrong. If the money spent is right, and if the wage rate is right, the hours have to follow, like night and day, as being correct.

Q. Well, Mr. Gough, isn't it perfectly apparent that 6724 you have got a lot of other costs besides labor costs?

A. In the labor accounts?

Q. Sure. You have got the use of machinery and equipmen and all that sort of stuff?

A. That is true. It is a relatively minor thing, and Mr. Anto nelli so treated it, because he used a labor rate to trend the whol account, and, if you are going to pick trouble with me on tha score, you would have to pick trouble with him on that score

Q. I am not trying to pick trouble with you at all, Mr. Gough I just want your statement, and I think you have made it, tha when you use man-hours expended in your exhibit that that i not actual man-hours-expended, but a computed figure.

A. That is correct.

Q. Now, you have made a comment, I think, in reply to Mr Springer, that what you wanted to show was not methods of trending, but that Mr. Antonelli's trends were unreasonable, is that the substance of what you stated, Mr. Gough?

A. Well, I didn't want to show that they were, but I was obliged to, when I made the study.

Q. But you yourself, you say, developed no methods of trend ing—is that your testimony?

A. No. I have no thoroughgoing method of trending 6725 there.

Q. Let me ask you, when you state, on Page 7 of your exhibit, for example, in the second paragraph, last sentence, referring to two studies for various years which you described in the first part of that paragraph, and when you go on to state, "In both studies, the ratio that the costs of earlier years bear to the costs of 1938 were developed and compared with the trend factors used in Exhibit No. 20," what do you mean that that ratio is?

A. You mean what makes them comparable with the trend factors?

Q. No. What is this thing that you developed? You say it isn't a trend factor.

A. Well, it is a ratio that the costs of earlier years bear to the cost of 1938.

Q. Well, if you wanted to take the cost of earlier years and find out how you would translate them into present prices, wouldn't you apply these ratios that you use?

A. That might be—I think it would be a fairer method than Mr. Antonelli used, by all means. The only thing, however, is

that I wouldn't want to be placed in the position of saying, if I were making a trend, that I would exactly do that, because I haven't considered the question of what the right answer of how to get a trend exactly would be, you see.

6726 Q. But aren't these ratios that you develop all through your exhibit really trend factors developed on a different basis, which you used to say well, you don't think Mr. Antonelli's trend factors reach the right result?

A. Well, they are not trend factors, because I have not used them for trending, and if I were going to develop a trend I would have to consider a number of other things. For example, I would have to consider whether I would use the prices for 1938 that Mr. Antonelli used.

Q. Well, if these ratios that you have developed aren't trend factors based on another method of approach or analysis, or giving consideration to factors other than what you think Mr. Antonelli did, how could you say that his trend factors don't reach the right results because they don't reach the result that you would use if you used these ratios?

A. Well, I think it is possible, Mr. Milde, to point out the flagrant errors or mistaken methods that one man uses, without completely developing what you would do if you were going to do the job. That is all I am trying to say.

Q. Well, you would say, Mr. Gough, wouldn't you, that these ratios or trend factors that you developed would be items that you think ought to be taken into consideration in any proper trending?

6727 Mr. REEDER. I object.

Mr. SPRINGER. I object.

Mr. REEDER. The witness testified that he hasn't developed any trend factor, and counsel is trying to put words into the record that don't belong there.

Mr. SPRINGER. This is outside the scope of Mr. Gough's examination.

He said that he took Mr. Antonelli's study and made a test of it. He starts out with an assumption, for purposes of making a test with Mr. Antonelli's figures. He doesn't know whether they are right or wrong, but all he does is follow Mr. Antonelli in his reasoning, and tests it to find that it is in error.

TRIAL EXAMINER. Objection sustained.

Mr. MILDE. Note an exception.

By Mr. MILDE:

Q. Well, Mr. Gough, these ratios that you developed were not trend factors?

* * *

6728 A. They haven't been used to develop a trended cost.

By Mr. MILDE:

Q. I understand that. You haven't applied them to the whole property. But what are they?

A. Well, they are ratios of the cost of one period to the cost of 1938, as Mr. Antonelli developed costs for 1938.

Q. And what——

A. (Interposing.) I think he might better have used them as trend factors than what he did. Whether I would have so used them is another question.

Q. Well, your criticism of this and his unreasonableness, as you expressed it to Mr. Springer, is based on the fact that his results don't coincide with the results that you get by applying these ratios, isn't that so?

A. That is correct.

Mr. SPRINGER. Read that. I didn't testify anything. Read it, please.

6729 Mr. MILDE. You are doing your best to testify.

(Whereupon the last question, as above recorded, was read by the reporter.)

Mr. MILDE. And read the answer.

(Whereupon the last answer, as above recorded, was read by the reporter.)

By Mr. MILDE:

Q. Now, tell me why, Mr. Gough, you prefer the results of the application of your ratios to Mr. Antonelli's ratios.

A. They take into account the factor of productivity.

Q. And what does that mean?

A. Well, it means that you relate to the costs of today the methods of today.

Q. Well, let me ask you this: What result do you think he should have reached?

A. Oh, well, I don't know. You are asking me to extemporize a trended result.

Q. No. I don't mean in figures. I mean in principle. What result should he have reached?

Mr. SPRINGER. I object to it.

A. I am not prepared to say what his trend should have been, Mr. Milde.

By Mr. MILDE:

Q. No, but what should he have reflected in his final figures? You say he should have reflected present productivity
6730 and present prices, is that it?

A. Well, Mr. Milde, a trend usually is conceived as a short-cut to a reproduction cost new appraisal, and ideally, I think should equal—that is to say, if the original cost is correct, and if your factor is correct, you come to the same result that you would by pricing all of the property out at its present reproduction prices, but I wouldn't want you to put me in the place of saying what answer you should get by a trending or a reproduction cost appraisal, because that hypothesis involves, frequently, a tremendous number of incongruities. For example, you have 3,300 wells; if you had to drill them in '38 I don't know whether you could get the equipment or the trained personnel to drill them. It presents you with a great many problems.

Q. Well, I was just interested, Mr. Gough, in your theory that he reached an unreasonable result, and, as I get your testimony, you think he reached an unreasonable result because he arrived at costs which were higher than reproduction cost would be.

A. Yes: I just pointed out that one unreasonableness in his result. Now, if he had eliminated that, it was a major one. There might have been others—many others.

Q. And you also think, as I understand it, that, if he had
6731 done a job just as carefully as could be done, and following all suggestions that you might give him to assist him on that, that he ought to arrive at a reproduction cost of the property?

A. Well, Mr. Rhodes stated that ideally the two should come to the same answer, if you take into account the productivity factor, but I am not an expert on reproduction cost appraisals. I have never made one and I hesitate to tell you how it should be done.

* * *

By Mr. MILDE:

Q. Of course you recognized, Mr. Gough, in your exhibit, did you not, that what Mr. Antonelli purported to do was not to arrive at present reproduction cost estimate by a trending development, but to determine what this property would have cost, as it was actually built if the prices now prevailing for labor and material had actually prevailed since the beginning?

* * *

6732 A. Yes; that is what he purported to do.

By Mr. MILDE:

Q. Now, Mr. Gough, when you state, on Page 1 of your
6733 exhibit that the purpose of your study, and examining Mr. Antonelli's trends, quoting them, was to learn exactly by what means it was effected, and to ascertain whether the results obtained were in any sense a fair value of the Company's property. What you meant there was whether or not Mr. Antonelli's results reached correctly present prices and present labor productivity, and, in short, present cost of the properties, as they would be built today?

A. Well, either that or any other—there are two major tests of fair value—that is, original cost and reproduction cost—to be considered, and whether this met one of those tests.

Q. Well, your quarrel with him was that he arrived at results that were, in effect, higher than what reproduction costs would be as of today?

Mr. SPRINGER. I object to that. Mr. Gough has said he just tested Mr. Antonelli's methods and found defects in them.

TRIAL EXAMINER. And he criticized them?

Mr. SPRINGER. Yes, but he didn't care what Mr. Antonelli's answer was. It was the method of trending that he was testing.

Mr. MILDE. You can't test a method and say it doesn't reach the right result unless you know what result should have been reached.

* * *

6734 TRIAL EXAMINER. I assume, when you say "quarrel," you mean "criticism."

Mr. MILDE. Criticism; yes.

TRIAL EXAMINER. Objection is overruled.

A. In effect, that is what he did, and I think it is the result of his methods which I think are at fault.

By Mr. MILDE:

Q. And that is why you criticized his methods?

Mr. REEDER. I object to that. The witness answered the previous question. Now counsel is trying to get him to say what reproduction cost ought to be today. He said over and over again that he isn't testifying as to that and, of course, it would be improper if he did.

TRIAL EXAMINER. Objection sustained.

Mr. MILDE. Note an exception. That is all.

Transcript Pages 362–373

Cross-examination By Mr. SPRINGER:

Q. Will you refer to page 21 of Exhibit No. 11, please? In the account Depreciation and Depletion Reserve under the year 1934, in the amount of $5,901,317.53, will you please explain the basis for that transaction?

A. In the year 1934, we adjusted our Depreciation and Depletion rates downward, and we applied that adjustment back to January 1, 1927, and we transferred from the Depreciation Reserve to Surplus this $5,901,317.53, with the approval of our West Virginia Public Service Commission.

* * *

Q. You say that you adjusted your depreciation rates downward in 1934?

A. That is right.

Q. What was the basis for that adjustment? Do you
363 have studies which reveal that you were charging too much annual depreciation expense?

A. Mr. Springer, you will notice that we have very high depreciations accrued, some $40,000,000, and we knew that that amount was greater than was needed for various provisions, and in determining this amount to adjust, our surplus was down rather low in the end of 1933, and we transferred the amount that we thought would be necessary to carry on our business in the amounts that might be needed. In adjusting those rates, we took into consideration, of course—we made a study of our retirement losses and other provisions for which depreciation might be needed.

Q. Do you have that study available?

A. We have where the adjustment was made.

Q. You spoke of a depreciation study which prompted you to change your rate of depreciation on certain property, I believe?

A. In determining these rates, we applied—at the end of 1926, we had settled our tax matters with the Income Tax Department, and the rates that they had approved for tax purposes, a number of them were used in this adjustment.

Q. Is there a study which was prepared by your staff to
364 determine the proper rates of depreciation for the various classes of property for 1934 on?

A. No detailed study; no, sir.

Q. How did you reach the conclusion without a detailed study?

A. It was more a—there was no detailed study made. It was more of a judgment figure.

Q. How do you account for depreciation?

A. I might explain briefly that over a period of years—over a 40-year period, it has been the practice of the company to set up annual amounts that would provide for retirements—the amount of money that we would need in the business to develop the property.

Q. Was that based upon age life studies?

A. No, sir.

Q. And the result of setting up that—that is a judgment figure, I assume?

A. Well, the whole plan was to keep enough money from revenues, from earnings, to develop the property with. There is a substantial amount of it that has been developed from money retained in the business from revenue.

Q. Do you have a study of the life expectancy of the various classes of property in the Hope Natural Gas Company?

A. No; we do not.

365 Q. Do you know the present age of the major classes of property in the Hope Natural Gas Company system?

A. No; we do not.

Q. On page 6 of Exhibit 11, you show that for production system property, you reduced the rate of depreciation for unoperated acreage, for instance, in 1929, from 10 percent to 8 percent in 1938. What is the explanation for that?

A. Beginning with 1923, we had set up 10 percent on unoperated acreage to make provisions for acreage cancelled and surrendered, and that rate was found to be accumulating too much in amortization, and it was reduced to 8 percent.

Q. And how did you reach the conclusion that it would accumulate too much?

A. Well, the amount accumulated over the period of time was too large in proportion to the amount of investment in that unoperated acreage.

Q. What is the explanation for reducing the rate of depreciation on general structures from 5 percent in 1929 to 3 percent in 1938?

A. These different rates on various classes of property were only used and adjustments made to determine the annual
366 amount—the adjustment in the annual amount that we wanted to reduce.

Q. You said that you do not have the information on the age or the average age of any of your classes of property?

A. We do not have it as such; no.

Q. In your annual report to the West Virginia Public Service Commission, don't you set out the pipe by size and average age?

A. I believe in making that report there is some computation put in there—some figure put in. However, it does not mean anything as to the actual age. It is an average.

Q. You file them as actual reports on the operations and information about your company?

A. The report called for it, but we did not have the information, and there is just some computation made there on an average basis. It is not exactly correct, but it is used as an average age.

Q. You say over the 10-year period mentioned in your Exhibit No. 11, page 6, there has been a decrease in the annual depreciation rate. You say that there is no scientific study upon which you base that decrease?

A. No; there is not.

367 Q. Well, I cannot understand how you can guess at what is a proper annual rate of depreciation without mortality data or age-life information of your property. How did you do it?

A. The plan that we followed, as I explained to you, Mr. Springer is—we take into consideration the annual amount of money that we might need. We know what our retirement losses have been over the past few years, and we know what our losses to capital account has been, and we take all of those different factors into consideration, and we aim to keep in our business a certain amount of money needed to provide for those things rather than to do new financing.

Q. What will you do under the prescription of the new Uniform System of Accounts prescribed by the Federal Power Commission effective January 1, 1940, which prescribes for the annual accruing for depreciation accounting on other than the retirement account basis that you speak of?

A. We are now installing that system and we are having our engineers and so on make a study of these depreciation matters, and we will endeavor to put that into effect.

* * *

369 A. It has no connection with these statements here, Mr. Springer. It is a separate matter. I have been trying to tell you what we have done. You will notice that we have got $10,000,000 here in these depreciation reserves. The company is 40 years old, and there has been no scientific study made of this depreciation and so on in the plant, in fact we did not operate that way, and as I have endeavored to explain to you before, it has been the company's plan and procedures and working all down through—of course, 40 years is a long time—but they have used this depreciation here just as I see it in keeping in the business and retaining from revenues and, so on the money to finance themselves and to develop their property. A substantial amount of their property has been developed through this medium rather than to—in fact, you could have—if you had had the actual accrued depreciation in the plant, you could have set up a smaller amount, and if you had followed the same procedure you would have had a very large surplus, so that in the $40,000,000, quite a bit of that is excess surplus. On the other hand, with going along on that basis, if they had paid out—if they should have paid it out in dividends and then extended their plant and additions, we would have had to put
370 out new financing to do it, but they elected to go this route.

Q. You have never practiced depreciation on what is known as a straight line basis?

A. Well, we have applied different rates to various classes of properties. Those are kept more as working sheets or data like that in order to accumulate—in order to determine the annual amount, whether you wanted 1½ million dollars, whether you wanted 2 million dollars. However, the amount that is accumulated on the various features of investment in the depreciation

account really does not mean anything as to the actual depreciation of the plant.

Q. Those working papers you spoke of were the basis of your conclusions? Could those be furnished to Mr. Lyon tomorrow?

A. You have reference to this adjustment that was made in 1934?

Q. Yes; I would like to see the studies that were made. You spoke of negotiations with the Bureau of Internal Revenue. You apparently had studies to back your claim up, and if you would give Mr. Lyon access to those tomorrow, I would appreciate it.

371 A. I think we furnished to your staff the rates that the Bureau of Internal Revenue had fixed for the various classes of property on a straight line basis.

Q. The working papers behind those are available, aren't they?

A. We had no working papers.

Q. How did you substantiate you claim for certain depreciation rates at that time?

A. With the Bureau?

Q. Yes.

A. They fixed the rates.

Q. Do you have the basis of their computations?

A. No; that was done—at the time these rates were agreed upon, and so on, was just by discussion and talking the matter over and a certain rate was on transmission, and as I recall it was 3½ percent—transmission investment. A certain rate on this class of property or that class of property and certain allowance was made.

Q. Didn't you disagree with them on any of the rates of depreciation that they selected?

A. Yes; we may have argued with them on some of them.

* * * * *

373 Q. Mr. Chisler, will you refer to page 21 of Exhibit 11 again, the item of Depreciation and Depletion Reserve in the amount of $5,901,000. Is not that adjustment of those reserves properly an adjustment of operating earnings shown on page 20 of this exhibit?

A. I would say not. We had closed our books for these various years, and after this 1934—this adjustment was made direct from the depreciation reserve to surplus. Page 20 shows just exactly what we did on our books.

Q. But the origin of the approximately $6,000,000 is operating income, isn't it?

A. Well, of course, on your depreciation expense along there—if you would change that depreciation expense it would show a different result in the net income.

Q. That is what you are doing in effect, is it not?

A. Well, you make adjustments from time to time for prior years, dividends, and so forth. You may adjust your surplus account, but your surplus adjustments will be taken ito consideration on any study that you want to make of the year's business. We have done this just as it is reported on our books.

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880 **TESTIMONY OF HOPE WITNESS RHODES ON OBSERVED DEPRECIATION**

Transcript Pages 880-1013, 5308-5313, 5962-5965

* * *

Cross-examination by Mr. SPRINGER:

Q. Mr. Rhodes, in Exhibit 21, reproduction cost new less depreciation of company properties as of December 31, 1938, will you define depreciation as you have used it in your exhibit?

A. In brief, it is the extent to which probably has been consumed or otherwise used up in the operation of the company.

Q. Is that loss in service value or physical deteriora-
881 tion?

A. It is all the depreciation which exists, in fact, in the property.

Q. Could you list the elements that cause depreciation?

A. Corrosion, wear and tear, deterioration from the elements, exhaustion of gas wells, and to a minor extent, the obsolescence of certain parts or types of equipment in the property which are leading to retirement.

Q. Did you also consider inadequacy of equipment?

A. To the extent that it has any application; yes.

Q. You have probably described changes in the art as obsolescence; is that so?

A. Yes; changes in the art may be a cause of obsolescence.

Q. Have you considered the requirements of the public authorities?

A. To the extent that they are applicable.

Q. And the changes in demand upon the Hope Company?

A. To the extent that it is applicable.

Q. Will you define what you term as condition percent in your exhibit?

A. It is the percentage amount—it is 100 percent, less the amount of depreciation as I have defined already
882 expressed as a percentage.

Q. Would this be in essence your test, the percent which the condition of the unit of property in question as it existed when examined, bears to that of a like unit of property of the same size, kind and description, similarly situated, but new, and new is 100 percent?

* * *

The WITNESS. That would substantially be my test. The question in my mind is as to the meaning of "like." If by "like" you mean identical, that is so.

By Mr. SPRINGER:

Q. You have used the words "percent of depreciation accumulated" in your exhibit.

A. That is right.

Q. Is that the complement of condition percent?

A. That is the difference between 100 percent and the percent condition of the property.

Q. If you added percent of depreciation accumulated and percent condition, you would get 100 percent?

A. That is correct.

Q. How can you arrive at such a thing as a percent of a condition in which property is found?

A. By taking into consideration the factors which
883 cause the property to be used up and consumed in the operations of the company.

Q. What instruction did you give the men who inspected the Hope Natural Gas Company's properties?

A. The instructions that were given to the men who inspected pipe lines were to inspect two contiguous 18 inch sections of pipe in test holes that were prepared in advance, measuring and recording in each section the twenty or thirty deepest pits that they could find in each of those sections as to depth, taking special care to clean out the rust and scale that might have accumulated when the pipe was in the ground, and to record other conditions as to surface drainage, ditch drainage, character of soil and other factors that have an effect upon the deterioration of the pipe.

The men inspecting machinery were instructed to determine the extent to which that machinery, the wearable parts of that machinery, had worn out in service. The men inspecting buildings were instructed to record the extent to which the building in its various parts had rotted or deteriorated or otherwise worn out.

As to buildings and equipment, they were also instructed to report any special conditions that to them seemed to require consideration. They were all sent in the field to ascertain
884 facts, which facts were brought into the office, correlated and made available for my consideration.

Q. Can two men look at the same piece of property and reach the same conclusion on the condition percent?

A. Substantially so. I have had tests made at various times in that direction and obtained results that were substantially identical.

Q. Did you give your inspectors a form sheet to fill out for the condition in which they found the property? Did you have a base assumed below which percent condition could not go?

A. No. They were asked to record the deterioration in machinery, for instance, those things which wear out in service, all of the things, and when worn out, they were done. The same thing was true of buildings, and it is well illustrated by the fact that reports came back on some buildings, with nothing but scrap value. There was no bottom.

Q. Didn't you have any classification of good condition, very good, or fair condition?

A. Yes. There were definitions under which they worked. They were asked to record as being in excellent condition, for instance, anything which they inspected which, so far as they could see, had not deteriorated at all. Another
885 common condition, they were asked to put in bad condition anything which they saw which was seriously deteriorated and in imminent need of heavy repairs.

There were intermediate conditions between those two, such as good, fair, and poor; in other words, it started out excellent, good, fair, poor, and bad.

When they found conditions that were worse than seriously deteriorated and in need of imminent repair, they reported the thing specially as worse than bad, and in connection with buildings, I noted from viewing the individual inspection sheets, that there were several degrees of badness, worse than the bad.

Q. Do I get the impression then that your men's judgment of condition percent is an estimate of deferred maintenance in the property?

A. No. Deferred maintenance is neglect. Property deteriorates and begins to decay or begins to wear out almost from the beginning, and it is not deferred maintenance until the owner

has failed to correct that depreciation when he should. They have determined the extent to which it had accumulated.

Q. Is it possible to distinguish between what you call deferred maintenance and condition percent?

A. Yes. As I have explained before, deferred maintenance is not deferred maintenance until the property should be repaired.

886

Q. But your men have classified property as badly in need of repair?

A. No. I said badly deteriorated and in imminent need of heavy repair. If a building, for instance, were neglected after that, so that it began to fall into ruin, that would be a result of deferred maintenance, but nevertheless, when the building was ruined, would be completely depreciated.

Q How did these inspectors translate their estimate of condition percent from their minds to your mind, for the preparation of this exhibit?

* * *

Q. Will you explain now the different methods used in determining the condition percent of the major classes of property so that we can start on a common base.

887

A. Well, take compressor engines, for instance. Those engines are inspected by a man who has been living with compressor stations and their construction and rehabilitation for a number of years.

He has erected and dismantled and repaired engines of the kinds that represent the greater part of the cost of the engines in this property. He knows just what parts of these engines do wear out and which do not wear out, and we ascertained from the manufacturers the extent to which those various parts contribute to the cost.

Now, for instance, the main frame of an engine never wears out and it is never replaced, except as the result of an accident, and it does not depreciate.

The shaft of an engine rarely if ever is replaced because it wears out, and certainly the fly-wheels do not wear out. There are certain parts such as separators between cylinders in which the crosshead runs, and very little of that ever wears out. The pistons, piston rods, parts of the cylinders, parts of the cylinder heads and valves all wear out.

Now, in an engine, roughly speaking, the parts that wear out cost 30 percent of the whole cost of the engine, and the

888 parts that are never replaced except as the result of an accident, and never retired, except as the result of an accident, cost about 70 percent. Those are in round figures.

In conditioning engines, I found that this inspector had carried out his instructions, but that his recording as bad was only for those parts of the engine which were ready to be replaced in toto, so that those parts which were called bad were rated as not quite but almost gone. The parts rated as excellent were rated not at 100 percent, but partly worn; with the overall result that on this property as a whole he found that these parts that wear out in service were not quite half worn out; in other words, the depreciation, the wear and tear in the engines, was something less than fifteen percent of the total cost of the engines.

He determined the wear and tear on the engines as a matter of fact, based on his knowledge of the parts. He took into account the condition of the engines as indicated by the service records, he consulted the chief engineer in the station as to major replacements in expensive parts in recent years. His figures finally conveyed to me the extent to which those parts that wear out had worn out, and that was the starting point with respect to compressor station equipment when I started.

889. I made an addition to the depreciation which he found, the wear and tear, to reflect reasonably the cost of dismantling those parts when they had worn out. Furthermore, I found, I think it was two engines of a type that the Company has been retiring rather than moving to new locations, over the years, which engines I marked down to I believe the figure was 50 percent. The engines are perfectly useful in their present locations, but based on the Company's practice in the past, I concluded that they probably would not be moved to a new location when the other equipment in the station was moved.

I also found that there were certain details in the auxiliary plants; for instance, rather complex methods of driving the pumps and compressors, and electric generators, and so forth, which the Company was gradually displacing with the simpler and more economical drives.

That equipment was heavily marked down to reflect the practice of the Company in the retirement of that property. I also found that there were some engines of another type that this company and its sister companies are modernizing through the retirement of some parts of the engines and the fuel supply piping to these engines, and are gradually replacing with the new

and more modern parts, and the necessary change in the
890 piping to accommodate those engines, and all of such engines were marked down to reflect very heavily the probability that these parts of the engines would be replaced fairly completely in this property, as they have been in some of the other properties.

Q. How much of the property that you have described could be seen?

A. The parts that are retired and replaced can be seen to the extent of probably 90 per cent. Of course, the actual wear, the things that wear out, are concealed, but the things that cause the replacement, for instance, of gas engine cylinders, in the long run, is the accumulation of too many body cracks in the cylinders. These engines gradually crack in service from changes of temperature, and sooner or later the parts of the cylinders are replaced. The practice of the Company in this respect was taken into consideration by this inspector in arriving at the condition.

* * *

891 With respect to the extent to which the property would be seen, I have very definitely in mind in reaching my final conclusions as to the total depreciation accumulated, in the compressor station equipment, that there are sources of depreciation other than those which can be seen, and having that in mind, I increased the depreciation which could be seen from 17 per cent by an additional two per cent which I believe adequately reflects all of the other causes of depreciation in compressor station equipment.

By Mr. SPRINGER:

Q. All causes other than wear and tear, you have given——

A. (Interrupting.) No; wear and tear and those that can be seen. You can see, for instance, that these two engines that I mentioned, that I marked down because the Company had been replacing them, you can see in your inspection of the property that they are becoming obsolescent; you can see from an inspection of the property that this complicated method of driving auxiliaries was being gradually retired and replaced with a simpler one. That is, change in the art or obsolescence.

892 We could also see, and which I failed to mention before, that there is certain compressor equipment in one station, in fact, that is not being used, and that equipment was reduced down to the warehouse value of the equipment, as though it were

carried in the warehouse stock instead of the compressor station operating equipment. All of the cost of the installation has been eliminated, and all of the parts that could not be salvaged were eliminated. Those are things which can be seen by an observation of the property.

The additional 2 per cent was to cover those things which are likely or have been causing retirement of the company's compressor stations in the past—an allowance for a continuation of that in the future, having in mind that there is a very high salvage on this type of equipment, most of which is moved bodily to a new location.

For instance, at the present time a station is being built down at Hunt, from equipment, practically all of which is taken from other stations in the company or its affiliate,—the Reserve Company, which has now been absorbed.

Q. Would you describe in a little more detail the inspection method used to determine the condition percent in compressor station equipment?

A. Each piece of equipment was examined thoroughly
893 and carefully to the extent that it can be examined without dismantling, by a man that is thoroughly familiar with the details of the construction and operating troubles of that equipment.

Q. And you said that thirty per cent of it was wearing parts and seventy percent nonwearing parts?

A. That is right.

Q. Then does it follow that a compressor engine does not depreciate below 70 percent?

A. I have depreciated two of them down to 50 percent, but in general that is so. An engine could have all of its wearing parts completely worn out, in fact moved to a new location, it may be the case, with the wearing parts all replaced, and that engine would be absolutely as good as a new engine, and it would last indefinitely, because the nonwearing parts are not replaced as a result of wear and tear. Nothing but an accident or an explosion or a fire.

The TRIAL EXAMINER. That is without consideration of obsolescence, is it not? You do not mean that that engine would be as efficient as the new engine or modern engines?

The WITNESS. It would be just as efficient as it ever was or as a modern engine of the same type would be. The greater part of

894 this company's engines are National Transit four-cycle engines or Worthington four-cycles, or Westinghouse. Those engines are very much, in fact almost identical with the engines that are built today, and when thoroughly overhauled, as they are when sent to a new location, will operate with substantially the same efficiency as an engine bought today.

Of course, the two-cycle engine, when overhauled, operates just as efficiently as the simple two-cycle engine when bought today. It can be by the replacement of certain parts, improved in efficiency considerably, and it was for that reason that I made provision for the retirement of those parts which had to be replaced in that improvement.

Now, there are other types of four-cycle engines, for instance, the old Snow engines, that they do not make any more, but those engines are just as efficient after a complete overhauling as they were when they were first built. They will never be retired because they are not quite so efficient as the type of four-cycle gas engine which is more common in the company's property. They move it to new locations as circumstances indicate.

By Mr. SPRINGER:

Q. Mr. Rhodes, in what percent condition would a compressor engine be before retirement?

A. You mean before the engine itself is junked?

895 Q. Isn't there a point where maintenance is so great and depreciation is so advanced that it is uneconomical to run an engine or compressor?

A. No; that is not so. Compressor engines never get in that condition unless they are grossly neglected by the operators. You can take an engine that has been grossly neglected by the operator and you can replace the wearing parts and tune it up and it will run just as efficiently as it ever did. The cycle of replacement of these parts that wear out is fairly short in the case of some things. There may be some things, every two or three years, like valves, in certain locations, and maybe cylinders will last twenty or thirty years on the average, but sometimes they last only a few years, but the engines, if properly maintained, do not become increasingly expensive to maintain, as a general thing.

Q. Did you determine the age of every unit of property?

A. No; I was concerned only with its physical condition, because irrespective of its age, it can be restored to perfect condition for a relatively nominal cost. Age has nothing to do with the retirement of gas engines. In the Company's experience here,

the only cause of engines that have ever been retired, as
896 nearly as I can find out, has been either as a result of an accident or of this one type of engine which would be classed as a freak type which has never proved satisfactory in operation, and they are retired only when the question of movement to some other location is involved, and it is decided that it is not worth while to do that. Those are the only engines retired, as far as I have been able to find out, and they represent possibly 1,000 horsepower out of 90,000 odd which the company owns.

Q. When you speak of freak equipment, do you refer to the $30,000 worth of equipment at the Davis station which was reconditioned and then sold for junk?

A. Those engines at the Davis station were of that type; yes. They were very expensive to repair, and very troublesome to repair when they got into trouble.

Q. Will you describe other methods of inspection to determine the condition per cent of compressor station equipment?

A. That covers compressor station equipment in general. Of course, buried pipe lines, for instance, in compressor station yards, are taken to be in substantially the same physical condition as the other pipe lines. The buried pipes, valves and fittings that connect the yard lines to the engines, were placed in
897 the same condition as the engines. They consist of parts that do not wear out, in fact, the only parts that do wear out are the rings and the packings in the valves, but they were placed in the same condition as the engines, and so was the other property which was buried, in connection with the engines, such as the foundations.

Q. Will you please turn to page 19 and 20 of Exhibit 21 and describe the methods of inspection you used in determining the percent condition by the accounts as they are described there, and if you do not have a separate method of inspection, then please describe the ones you did employ.

* * *

The WITNESS. There were only three basic methods of inspection. All equipment, whether it be engines, compressor cylinders, valves, fittings, regulators, meters, drilling and cleaning equipment or whatnot, all of that type of equipment was inspected by the use of the principles that I have just outlined. The differences between them are really minor differences in that a more thorough inspection would be given of an expensive piece
898 of machinery than of a cheaper piece of machinery.

The second method of inspection relates to structures, and a third method of inspection relates to underground pipe lines.

The gas wells were depleted not by inspection but in proportion to the reduction in useful working pressure.

As to buildings, and buildings at compressor stations, they were inspected at the same time the equipment was inspected, by a man who was a building designer and constructor and who was living with the design and construction and repair of structures for a great many years. He has built structures for me and he has designed structures for me, and he has torn down structures for me. His instructions were, as I have already stated, to record excellent, good, fair, poor and bad, and he reported 45 degrees worse than bad.

I found myself in discussion with him of what his intent was, and again we found that an excellent part of a structure—and he inspected the structures in their various parts—not just looking at a structure, but he inspected the foundations and the framework and the walls and the roof and the floors of the structures—I found that these parts that he had rated as excellent had deteriorated on the average not over 5 percent, and the worst degree of bad was down to junk, so we weighted it—he had about ten degrees of condition—and we weighted those conditions of the various parts of the buildings, or rather, he did, in the proportion as they contributed to the cost of the building, and got a rating for the building.

The building might have had a rating of poor or fair that he arrived at by that method. Then he put together in a similar manner the ratings of all of the buildings in a group, like at a compressor station, and gave me that rating which he translated into a percent deterioration, in other words, it was his opinion as a result of that calculation, that the buildings in that group had deteriorated so many per cent.

Q. Could you tell me the inspection method employed to determine the percent condition of the drilling and cleaning equipment?

Mr. MILDE. Are you through with your explanation of the buildings?

The WITNESS. No; I am not.

The TRIAL EXAMINER. Before you go any further, I would like to ask one question. How did he average the grades of his good, bad, and so forth, in order to arrive at a classification of the whole building?

The WITNESS. In buildings, for the purpose of weighting, he just used consecutive numbers. That is all that is necessary, but the effect of it was to rate as excellent, five per cent depreciation, and each one of his successively poorer conditions was ten per cent worse.

The TRIAL EXAMINER. He inspected the foundations, for instance, and he rated that, we will say, as excellent?

The WITNESS. Yes.

The TRIAL EXAMINER. Then he rated the walls, we will say, and he rated them good.

The WITNESS. Yes.

The TRIAL EXAMINER. And the roof he rated fair, or something like that?

The WITNESS. Yes.

The TRIAL EXAMINER. Then how did he get the average for the whole building? Did he reduce it to percentages?

The WITNESS. He did not do that, although he could have done that and he would have had the same answer. If he had carried out his weightings, for instance, by calling the excellent foundation 95 per cent, the good frame 85 percent, and say the fair roof 75 percent, and so forth, he would weight those percentages in proportion as these various parts contributed to the cost,
901 and he would end up then with a weighted average percent.

It is easier to work with index numbers, which will give you the exact result—exactly the same result, but in effect that is what was done.

When this man's work was finished, and he had assistants with one or two other men, I spot checked their inspections, and without know what their figures were, or their results were, and those checks came, as I say, substantially to the same answer.

These figures were totaled for all of the buildings in an account, and I was given a statement as to the percent of deterioration he had found in that account. I adjusted that to fairly reflect the cost of abandoning that building or tearing it down or tearing down parts. I adjusted that to reflect buildings, the usefulness of which had ceased.

For instance, in that Davis station that was just mentioned were five engines that had been junked, and I reduced that portion of the building which was of no use, to the scrap that could be obtained from tearing it down.

Incidently, that building will later be used, or soon will be used, for auxiliary equipment to release a present auxiliary building for storage purposes. But there are other buildings, like the Lemley station, for instance. That station is a
902 station in which the equipment had been reduced to its warehouse value. That building has no use except to shelter that equipment which is remaining there pending its need in some other location. That building was reduced to salvage value.

In other cases, wherever we found that there were buildings that we had the reproduction cost new, we reduced those buildings down to salvage value.

In the case of some types of buildings, like small buildings, housing field meters and those buildings can be picked up bodily and moved to a new location when they cease to be used for that particular location—the same is true of meter boxes, but when you are dealing with large buildings of the type most commonly used by the Company, they are torn down, various parts of them are salvaged, and used over again for other structures, in various accounts.

Having thus determined all of the depreciation which could be seen, namely the deterioration of the buildings and the fact that they were not used, I then, realizing that there was depreciation from other causes, more or less intangibly, which could not be seen, I increased the depreciation.

For instance, the gas well structures, the observed depreciation was 40 percent when I corrected it, but I added 4 percent
903 more, and generally throughout these structures, I have decreased the depreciation observed by, in round numbers, one-tenth, to reflect that depreciation which cannot be seen but which is leading and has led in the past to the retirement of the structure from service. That method was applied to all of the structural accounts.

Gas well structures, field measuring and regulating station structures, other production system structures, compressing station structures, transmission system measuring and regulating structures, and other transmission structures and general structures. In every case it started with observation of deterioration on the part of a man skilled in the art of designing, constructing, and taking care of buildings.

Q. Is it fair to state then that in every case where condition percent of units of property was estimated, that the physical deterioration was the major factor?

A. That is correct.

Q. Will you please describe the method of inspecting drilling and cleaning equipment?

A. The drilling and cleaning equipment was inspected by the men who are using that equipment and not by our men. I rated the equipment at its usefulness to them and then
904 later, after consultation with me rated it down to the extent that it had worn out, reflecting what they had been able to get on the average as salvage. Equipment for which there was no use was reduced to what they were currently obtaining and selling such equipment in salvage value, for partly worn out equipment.

I took that into consideration by some calculations made from a portion of the equipment, for instance, such as bits for drilling. Those bits are six feet long when they are bought, and there is about three feet to wear, or thereabouts, and we had the measurements of a great many of the bits, and I found out what proportion of the useful wearing portion of the bits had been consumed and used that as the test of the reasonableness of the company's inspection of the equipment which they were using.

In the matter of cordage, for instance, like cables, which wear out fairly rapidly, I saw to it that the condition of those things was marked down substantially to half way between new and junk value, because they exist in all conditions, from new cables that have never been used, to cables which will never be used again after they come off the present job. But, as related to the equipment, its wear and tear of the equipment that is being and can be used, and the salvage value of that material which
905 they can and are disposing of as fast as it can be absorbed.

Q. Is there any difference in durability or efficiency of drilling and cleaning equipment? Have there been any advances in the art of manufacturing drilling and cleaning equipment?

A. Yes; but the equipment which the Company now has that might be in that class is practically all of the new type. The particular advances in the drilling and cleaning equipment have been in the use of portable outfits, which the company has thirty or forty of—I forget the exact number—which make it unnecessary to move in and erect a derrick and set up the house for the engine and the belt house, etc. That is required with the old

type of drilling and cleaning equipment, but with the new type, they move a portable outfit up there, and it is in, everything is there that is required to do the job. There have been no particular improvements other than that, and for the purpose of repairs and deepening of wells, which is the company's use for it, the bits that they have are just as effective as though they were made of the more modern steels, which perhaps would be more desirable, if the company itself were going into a heavy drilling program, but for the purposes of repairs, there is nothing better than that which the company now owns.

906 Q. Does the company drill its own wells?

A. Not now. It deepens wells at times, after they have been cleaned out.

Q. Does it have use for what you estimate to be more than a million dollars worth of drilling and cleaning equipment?

A. Well, I examined the principal operations carried on by the company for the past fifteen or twenty years that required the use of drilling and cleaning equipment, and found out the maximum needed at any one time that was likely to be needed, and the company could not get along with less than sixty of such outfits, and probably should have seventy or eighty of such outfits.

Well now, the outfit required to clean a well costs just about the same amount as the outfit required to drill a well—somewhere between $12,000 and $15,000, depending upon its type. Eighty of such outfits would cost approximately $1,200,000 and sixty almost $1,000,000. That relates only to those things which they use immediately in cleaning the wells. The company, in addition to that which is actually being used, has different stocks of spare parts and spare material, special tools, and so forth, so I reached the conclusion by that independent study, that the total amount of drilling and cleaning equipment of

907 $1,000,0000 was by no means excessive, and its depreciation to $751,000 fairly represents the extent to which that has worn out, and the extent to which salvage can be had of the equipment that they cease to use.

Q. Did you take into consideration in your condition percent estimate for drilling equipment, the proportion of the cost of such property which has already been charged to the drilling of the wells?

A. I considered only the equipment as it exists, and what it would cost to replace that equipment.

Q. Will you please describe the method of inspection used to determine the condition percent of transportation equipment?

A. We studied the record of automobiles for the last ten or fifteen years, that were retired, to find out when they were bought, when they were retired, how much was paid for them, how much was received for them, how many miles they had traveled before they were finally turned in. We studied the record and found that the company was getting an increasing mileage of its automobiles and trucks before they were turned in, in fact there was a considerable increase, particularly in trucks.

We found out from that trend in increasing mileage, what the mileage fairly was as of December 31, 1938, and
908 the passenger automobiles, for instance—we depreciated them, rather, in the proportion of the mileage that they had had run on the average, at December 31, 1938, which that bore to the total mileage to be expected from the automobiles as of that date, reflecting of course as a minimum the average turn-in-value of the cars.

Q. Didn't you consider the year on the Blue Book rating?

A. We gave no consideration to that. It was based wholly on the company's experience in the retirement of cars and the increase in mileage that they had been getting from cars and trucks, and the actual mileage of the cars and trucks, as of the date taken. In other words, they were depreciated in the proportion as they had used up their mileage possibilities.

Q. Then you did not inspect them in the manner in which you inspected the compressor station equipment?

A. No; they were not inspected. It is a relatively unimportant account. This method of arriving at the depreciation we considered to be a complete determination.

Q. Will you please describe the method of inspection for determining the condition percent of office furniture and equipment?

909 A. That is another minor account. That equipment was all inspected. Each piece of equipment was inspected and rated from the standpoint of physical deterioration. That which was left up in Pittsburgh was conditioned in the condition that the People's Company were willing to take it over, except certain portions, which were described and were considered as junk.

We found that that equipment, by that method of inspecting it, had depreciated 27 percent, which I increased to 30 percent.

to make sure that the amount was adequate to cover all of the depreciation which existed in that furniture. That is a $200,000 account.

Q. Can you tell the percent condition of a table by looking at it?

A. One can estimate the extent to which it has deteriorated; yes. As related to any individual piece of furniture, the estimate is rather rough, but as related to hundreds of pieces of furniture, these roughnesses iron themselves out, so that the over-all figure is reasonably accurate.

Q. You did not determine the age of any of them?

A. It makes no difference, because some of the oldest furniture in the world is the most expensive. Age has
910 nothing to do with it.

Q. Didn't you consider performance ability?

A. Performance has nothing to do with a desk which is physically perfect.

Q. You mean that you would put your feet on an antique desk?

A. No. There are no antique desks in this property.

Q. You just stated that sometimes it increases in value with age, but for utility purposes, useful purposes, that is not so, is it?

A. For useful purposes, a desk is just as useful fifty years old as when it is new, if it has been kept in repair and all of the parts are there, all of the drawers will operate satisfactorily, and it can be kept in that condition, and an inspector can tell from the appearances of furniture and an examination of it, how much of it has depreciated for practical purposes.

Q. Will you please describe the method of inspection to determine the condition percent of the tools and working equipment?

A. Frankly, we did not spend a lot of time on the depreciation of $5,000 worth of tools and work equipment. Some of that is equipment in the nature of special instruments, that are
911 useful for an indefinite length of time, in fact, if they deteriorate much they cannot be used. That $5,000 account, I have depreciated 15 percent.

Q. Will you please describe your method of inspection for determining the condition percent of the communication equipment?

A. The condition percent of the communication equipment was determined from an inspection of about five percent of all of the poles by a telephone man. The condition rating of the

poles, as excellent, good and bad, was rated down to a bad pole being ready for replacement and almost completely depreciated. The wire rated as bad was conditioned as to its approximate salvage value as copper, which is about 40 percent. The fixtures were rated the same as the poles, down to practically zero. The central station equipment, which does not represent a very large proportion, was rated by inspection, having in mind that in non-commercial service, telephone equipment has a long life.

I found, as a result of analyzing those conditions, that physically it was 27 percent depreciated. Realizing that there are some other causes of depreciation than the pure physical, it was increased by me to 32 percent. Following the determina-
912 tion of that depreciation of the equipment, I consulted with engineers of the West Virginia & Potomac Telephone Company, who agreed with me that it was a very reasonable amount of depreciation to find in a property such as would be owned and operated by a natural gas company, where style and commercial sales consideration do not enter into it. It is purely a service equipment.

Q. Did you employ the same man to determine the percent condition of communication equipment as you retained to inventory that equipment?

A. No; it was another man.

Q. Was there an inspection of rights of way?

A. We walked hundreds of miles of right-of-way in determining construction conditions and saw something over 2,000 miles of rights-of-way. The right-of-way itself does not depreciate.

Q. And that is true of natural gas producing lands?

A. In general; yes.

Q. In determining condition percent, did you instruct your men to consider the size of the unit of property?

A. There was no occasion to consider the size of the unit of property.

Q. Did you instruct them to consider strength of the unit of property?

A. Strength of a property does not deteriorate. The
913 strength of a pole at the butt is the dominant feature as to whether or not it is worn out or decayed to the point of almost complete depreciation, but the strength of a pipe does not deteriorate. The strength of a gas engine does not deteriorate. Strength does not enter into it except as it weakens the

thing through deterioration, which is reflected automatically in the physical figures which were brought in to me by the inspectors.

Q. Does the strength of a boiler make any difference in its condition per cent?

A. The strength of a boiler that has been for years passed by the insurance inspector as in perfect condition is not changed. That boiler has not depreciated from deterioration.

Q. Do you know what the average life of a boiler is?

A. The average life of a boiler might be from five years to a hundred years, depending entirely on how it is taken care of. I know that in the common run of boilers, that the insurance companies think of thirty years, but they will insure a boiler forty years old and take the full responsibility for all damage that can occur due to the failure of that boiler, if the boiler is kept up to their requirements on inspection.

Q. Did your inspection of boilers embrace a hydraulic
914 test?

A. No.

Q. Did you consider the elements of the dollars required to restore the item to condition as new?

A. No.

Q. Did you consider its age?

A. In connection with boilers, we did take into account the age of the boilers, in this way—I found that these boilers had various ages, up to fifteen years or so, and which comprised most of them, and that they had been running for years without any evidence of deterioration, as indicated by the reports of the Hartford Boiler Insurance Company inspectors, which is the company which insures those boilers. The inspector for the insurance company makes whatever inspections are necessary to protect his company. He reports defects, and there were no defects reported, and so I reached the conclusion that those boilers had, in spite of their age, only lived half the life, or rather, had only depreciated to half the extent that boilers do on the average, and so I took the figure as used by the insurance company of thirty years, and depreciated that one half to fifteen years.

Q. Did you consider the element of age in determining the condition per cent of the pipe lines?

915 A. Not directly.

Q. Did you consider the element of age in determining the condition percent of the compressor station equipment other than boilers?

A. I did not.

Q. Did you consider the element of age in determining the condition per cent of buildings and structures?

A. No, I considered only the defects of age.

Q. Did you determine the life expectancy of the units of property which you inspected?

A. No; we determined, however, the average extent to which the life expectancy of various retirement units and replaceable parts had been exhausted.

Q. How did you determine that?

A. The same way that you tell whether half of the gasoline in your automobile tank is gone or not. You know whether it is half gone or not without knowing how much the tank holds. I did it in just the same way.

Q. Could you illustrate that with a structure?

A. You cannot illustrate it perfectly. I explained that this inspector of structures rated the parts all the way from substantially perfect to ready to junk, and it was necessary to depend upon his judgment and skill as an expert on buildings,
916 which was done. You cannot measure it as related to a building.

Q. And you could not relate it to a gas engine either, could you?

A. Not readily.

Q. That would be true of all of the property, wouldn't it?

A. No.

Q. What are the exceptions?

A. You can measure it directly as related to pipe lines.

Q. Their life expectancy?

A. No; the ratio to which the various parts of that pipe line have lived their life expectancy without going through the age or the life expectancy, and you can determine the ratio.

Q. I shall read the definition from page 5 of Exhibit 13, which is the Uniform System of Accounts for Gas Utilities prescribed by the Public Service Commission of West Virginia in 1939: "Service value means the difference between the original cost and the net salvage value of the utility plant." Did you give that any consideration in determining the condition per cent of the units of the property?

A. Only to the extent of substituting reproduction cost for
o r i g i n a l cost, and substituting for the words "net
917 salvage value" the words "net salvage recoverable."

Q. Did you consider the capacity to do the work assigned to the unit, either as compared to a new unit of like type or a new unit of some better type?

A. The capacity of these units to do the work assigned to them has remained unimpaired.

Q. Do you mean that the art of manufacturing natural gas property is stagnant, with no improvements?

A. The improvements in the art of natural gas properties, which have led to these long distance transmission lines, mean nothing as related to a property such as Hope, with its thousands of points of receiving gas, its fifty-odd compressor stations, scattered all over the system, and its 4,000 separate pipe lines. The improvements in the art mean nothing there and will not lead to the retirement of any of the parts of the Hope's property.

Q. The new pipe lines being installed in the United States are so-called high pressure transmission pipe lines, aren't they?

A. Yes.

Q. And Hope's transmission lines from Cornwell station to Hastings, which is 92 miles of 12-inch pipe, capable of operating at a pressure of 1,200 pounds, is a high-pressure line?

918 A. That is right.

Q. Do you believe that the trend in natural gas transmission is to high-pressure lines?

A. Where the gas is to be transported in large volumes for long distances, yes; but it has not and will not lead to the retirement of any of the Hope's property.

Q. Did you consider the element of safety in determining the condition per cent of property?

A. Safety does not enter into it except in boilers, and the boiler inspector of the insurance company will cease to insure the boiler when it is no longer safe, but the boiler is perfectly safe as long as he will insure it. A gas engine thirty years old is just as safe as a gas engine bought yesterday, in fact I am not so sure that it is not safer for a year or two of operation. The pipe lines of this company are just as safe today as they were when they were built. The corrosion of pipe lines does not weaken them.

Q. Do they ever have joint trouble?

A. Surely; joints leak from time to time, and the leaks are fixed and they do not leak any more.

Q. There have never been any fires or explosions due to leakage?

A. Most inconsequential.

919 Q. Then really, your condition percent was based upon observed physical deterioration in the Hope properties, was it?

A. We started with observed physical deterioration. There was added to that all of the effects of obsolescence and things of similar nature which have been and are leading to the retirement of Hope's property, and on top of all of that, there was added an allowance which I deemed sufficient to cover all depreciation of all other kinds, existing in the property. Wells, of course you understand, we are treating purely on the pressure decline basis, to a net salvage value of equipment.

Q. Is your condition percent theory one which finds the Hope Natural Gas Company property, that is, the compressor station equipment, to be in 81 per cent condition on a depreciated reproduction cost of 19 percent throughout the life of that plant, and then indulges in an hypothesis of suffering a final loss to zero during the last stages of service, possibly within a year?

* * *

920 The WITNESS. No.

By Mr. SPRINGER:

Q. Exactly what happens when, as of December 31, 1938, you find compressor station equipment in 81 percent condition and next year the unit of that property is retired. Does it fall from 81 percent to zero within that period?

A. I know of no unit that is likely to be retired next year or for some years to come.

Q. If it comes within two years, does the condition percent go from 81 percent to zero within two years?

A. No. I said merely that the depreciation existing in the property as a whole is 19 percent—not that the condition of any one piece of property is any percent, but the property as a whole has deteriorated 19 percent from all costs. I do not attempt and it is fruitless to attempt to arrive at an exact condition of depreciation from all causes on any one piece of equipment. It can be applicable to a group of equipment, but not to one piece of it.

Q. You see, Mr. Rhodes, what I cannot see is how you find a piece of property at 81 percent condition this year, and within two or three years it might be replaced, and in that short period of time it goes from 81 percent condition to zero.

921 A. I have not found a piece of property is in 81 percent condition. I found $10,000,000. worth of property, con-

sisting of hundreds and hundreds of items that in the aggregate were in 81 percent condition. That $10,000,000 worth of property is not going to get down to zero percent condition tomorrow or the next day or deteriorate very rapidly at any time.

The TRIAL EXAMINER. That is the average condition?

The WITNESS. That is the average. Some of the compressor stations there, I have made adjustments that would reflect some of them as merely warehouse value of the equipment that is in those stations. Other engines, as I told you, I have marked down to fifty percent, because I thought that they would be retired before they were really worn out.

I made an inclusion in my depreciation to reflect that fact, but I have not set a percent condition, and am not setting a percent condition on anything other than the entire compressor station equipment account.

Q. Pardon me. Didn't you say that you found some property which you considered to be in fifty percent condition?

A. I said I included in my depreciation an amount which was fifty percent of the cost of reproducing that property for the purpose of making the depreciation, which I found sufficiently large to include all of the depreciation from all causes.

Q. Under your theory, the condition percent of the Hope Natural Gas system cannot vary throughout its lifetime from say an average per cent condition of 50 and above, is that so?

A. Oh, probably it will never get as low as 70.

Q. And yet, when one of those units of property which make up the composition of the system is retired, that must be in zero condition?

A. No. It will be retired from one location and installed in another location, and that is what has happened to this equipment in these stations that were no longer useful in the present location.

Q. But if it wears out?

A. But they do not wear out. There are a few units, which I explained, have been junked, because they were of a type which has proved to be an unsatisfactory type, and I marked those down, although they will continue to be used in their present location, for years to come, they are standby or spare equipment that are used under the conditions of extreme peak loads.

This company has not retired compressor station equipment except of the parts that cannot be salvaged when they

923 move the equipment in one station to another location.

Some of the underground pipe and some of the small valves and fittings, the foundations, and things of that nature.

Q. Mr. Rhodes, isn't there some unit of property in the Hope system that wears out after it has been used for a period of time and has to be replaced? Which is junked? Doesn't that happen in a natural gas system?

A. The cylinders of the gas engines; yes.

Q. Now, that gas engine you appraise today as being say 50 per cent condition——

A. All right.

The TRIAL EXAMINER. Did he not say it could not depreciate below 70?

The WITNESS. I have stated that I allowed in my total depreciation, 50 percent of the cost of reproducing. I think it was two engines, which were of a type which have not proved satisfactory. I think that is what he is referring to.

The TRIAL EXAMINER. There you are taking into consideration, perhaps, the retirement policy of the company, in addition to the condition of the equipment, are you not?

The WITNESS. That is right, and I also took that into ac-
924 count in conditioning this complicated drive of the compressor station auxilliaries, which I mentioned in conditioning or making allowance in the conditions of the two-cycle gas engines, which the affiliated companies, at least, are modernizing. I am taking into account all of these things which are determinable, and then making an additional allowance to cover the more or less indeterminate things, that cannot be measured or visualized.

Mr. MILDE. I think, Mr. Rhodes, you did say, in connection with some engines, that there were wearable parts involving thirty per cent on them to depreciate?

The WITNESS. Oh, yes. But, on the other hand, an engine of an unsatisfactory type, which would soon be junked, that 70 percent disappears, and that is a move in the direction that I think Mr. Springer is trying to bring out.

Those are the only cases that I found in the whole property where serious consideration needs to be given to the fact that the equipment is likely to actually be retired in part. The equipment is not retired when it is moved from one station to another.

By Mr. SPRINGER:

Q. I am still disturbed about the theory that finds property in a certain per cent condition today, and maybe in two years a unit of that property will be replaced and you drop from a high
925 percentage today to zero in a short period of time.

A. You could scrap any unit of property of this company, and eliminate it from the whole depreciated reproduction cost, and it would not have any material effect on the answer.

Q. Do bed plates for engines depreciate?

A. No; bedplates for engines are never replaced because they are worn out. Occasionally, they may be in an accident, or like a fire—having the same effect as a fire. Things do not depreciate because they may burn up sometime, and for the same reason bed plates do not wear out because sometime you have an accident and have to replace them. As a matter of fact, I do not think the company has ever replaced an engine bed plate in all of its history.

Q. Do you know whether or not it has replaced three engine bed plates at Cox's mill?

A. No; I do not know.

The TRIAL EXAMINER. Your theory of depreciation does not make any allowance for such contingencies as that, does it?

The WITNESS. Except as I am increasing the amount which I concede to cover depreciation from hidden causes. There may be flaws develop in the bed plate of an engine, there may
926 be flaws in fly wheels—fly wheels burst once in a while, but it is just a snare and a delusion to try to place any depreciation on a fly wheel because sometimes fly wheels burst, and bedplates and main shafts are in the same category.

By Mr. SPRINGER:

Q. Will you please turn to page 2 of Exhibit 21. You state that depreciation accumulated in the gas wells was determined from the proportionate decline of the useful rock pressure from the time the well was drilled, to a lower pressure, at which the well may be considered to be exhausted. By what conception of depreciation have you determined that the decline in pressure in a gas well is a measure of accumulated depreciation?

A. That is the exhaustion of the gas well in the operation of the Company, and it is measured proportionately by the decline in rock pressure from the initial pressure to the abandonment pressure.

Q. Why is a decline in the rock pressure the measure of accumulated depreciation in a gas well?

A. Because it is the measure of the extent to which the gas well has been exhausted in service.

Q. Did you consider the amount of gas exhausted or the reduction in the pressure?

A. The two are approximately synonymous, and it is a method of depreciating gas wells which has come into
927 common use and is accepted by the courts as well as by the operators, in the case of many companies.

Q. Do you say that pressure and volume are synonymous?

A. No.

Q. You used decline in rock pressure for your basis here.

A. That is right.

And decline in rock pressure is practically synonymous with the decline in the recoverable quantity of gas in the well.

* * *

928 By Mr. SPRINGER:

Q. Have you adjusted the rock pressure figures based upon the pressure gauges taken in the Fall of 1938 to the date of December 1, 1938, of your exhibit?

A. I conditioned the well to the rock pressure gauges
929 taken in the Fall of 1938, as being fairly reflective of the condition of the wells on December 31, 1938. Any further reduction is not measurable.

Q. There was no appreciable decline in rock pressure between your study date and the date of your exhibit?

A. There is no way to measure it.

* * *

Q. Do you know whether there was withdrawal of gas during those periods?

A. Certainly there was withdrawal of gas.

Q. Then there was a decrease in the gas supply?

A. Yes; if you want to split hairs, there was a decrease in the pressure at the end of December, December 31, 1938, as compared with September.

Q. Your study would not be perfectly accurate for today, would it?

930 A. Well, quite a bit of time had elapsed to today. If I wanted the condition today, I would take the latest rock pressure readings that were available, and determine it on the basis of those readings.

Q. Do you make a distinction between rock pressure decline and decrease of volume of gas supply?

A. They are practically synonymous.

Q. Where a natural gas property is retired, due to the exhaustion of the supply of gas, is the principal cause of the retirement the exhaustion of the pressure of the gas supply or the exhaustion of the volume of the gas supply?

A. The cause of the retirement of a gas well is generally the result of an accident. Gas wells as they approach the average abandonment pressure may have a cave-in or some other accident of that kind, and at the first opportunity a drilling and cleaning outfit goes out to the well and cleans the well out and tests the well. If, after they have cleaned out the well, that well has a satisfactory volume of production, it is restored to service, whether the pressure is above or below the average abandonment pressure. The actual abandonment is determined by whether or not the well can be restored to a useful well. If the well cannot be restored to a useful well by repair, the well is plugged up
931 and abandoned, whether the rock pressure be higher or lower than the abandonment pressure.

This matter of abandonment pressure is an average, and individual wells are not properly conditioned by the decline from their initial rock pressure to an average abandonment pressure, but the condition of a group of wells is properly determined by depreciating them from their initial pressure to their average abandonment pressure.

* * *

934 By Mr. SPRINGER:

Q. Mr. Rhodes, did you secure the initial rock pressures and abandonment pressures and the 1938 rock pressure from the Hope Company's geologists for use in your exhibit?

A. That is correct.

Q. If there are any errors in those pressures furnished to you, those would be perpetuated in your exhibit, would they not?

A. They would be reflected in the exhibit; yes.

Q. Will you please refer to your working papers and read into the record your determination of the percent condition of a gas well producing gas from one horizon?

A. It is explained in the text rather completely. We do not specifically determine a percent which I consider to be the percent condition of any one well. We determined percentages that when added together and averaged fairly reflect the percent con-

935 dition of the groups of wells.

Q. Mr. Rhodes, would you please in your example name the well and the sand and the date of drilling and the rock pressure?

A. I will take, for example, well No. 1270, which was drilled in 1909 into the 30-foot sand. The well had an original rock pressure of 860 pounds. The abandoning pressure for that 30 foot sand is 30 pounds, leaving 830 pounds as the useful or workable pressure in the well.

The annual tests of the well made in the Fall of 1938 where the well had been closed in long enough to develop the rock pressure showed that the rock pressure at that date was 230 pounds.

Subtracting 30 pounds abandoning pressure leaves 200 pounds as the remaining workable pressure. The ratio of those 200 pounds remaining workable pressure to the 830 pounds initial or original workable pressure gives 24.10 percent as the percentage condition of that well, or the percentage decline of that well down to the abandonment pressure. If the well happened to be abandoned at the abandoning pressure, then it would represent the exact condition of that well.

Q. Now, will you please give us an example of how you
936 determined the percent condition of a gas well producing gas from two horizons?

A. Well No. 1380 was drilled in 1910 into the fifth sand—please strike that; that is not a good example.

Well No. 2263 was drilled into the Indian sand and into the fifth and Bayard, which are produced as one sand in that well.

The abandoning pressure of both of those sands is 30 pounds per square inch. The initial rock pressure in the Indian sand was 350 pounds, leaving a workable pressure of 320 pounds. The initial pressure of the fifth and Bayard sands was 815 pounds, leaving a workable rock pressure of 785 pounds. In the annual tests in 1938, the Indian sand showed a work pressure of 97 pounds, leaving a remaining workable pressure of 67 pounds.

The fifth and Bayard sands were at 95 pounds pressure, leaving a 65 pound abandonment pressure. The percent decline in workable rock pressure in the Indian sand was the ratio of the 67 pounds to the 320 pounds, namely, 20.94 percent. The ratio of the 65 pounds remaining workable pressure to the 785 pounds original workable pressure of the fifth and Bayard sands
937 shows a decline to 8.28 percent of the workable pressure. The average of these two percentages is 14.61 percent.

which we have taken as the remaining percent of the workable pressure in the well.

Q. Will you please give an example of how you determined the condition percent of a gas well producing from three separate horizons?

A. Well No. 3570 was drilled in 1914. It passed through a number of sands, but these sands were grouped and have been produced as three horizons. The higher group comprised the Indian, the Gantz and the 50-foot sands. The middle horizon comprised the Gordon and the fifth sands. The lowest horizon was the Speechley sand.

The upper horizon, producing from sands with a 30-pound abandonment pressure had a 205 pounds original pressure, a 175-pound workable pressure, a 48-pound 1938 annual test, with an 18-pound workable pressure still to go. There was 10.28 percent of the original workable pressure remaining in that particular group of sands.

Similarly, the middle horizon has 30 pounds abandonment pressure, it had 530 pounds original rock pressure, with a 500-pound workable pressure, and it had an 86-pound 1938 test pressure, with a 56-pound remaining workable pressure. There was 11.20 percent of the original workable pressure still remaining.

938 The lowest horizon, the Speechley sand, has a 100-pound abandonment pressure. The initial pressure was 1,090 pounds, leaving 990 pounds as the original workable pressure.

The rock pressure in the 1938 annual test was 161 pounds, leaving a 61-pound remaining workable pressure. This gave 6.16 percent as the remaining portion of the original workable pressure. The average of these three percentages was 9.22 percent, which is the average of the remaining workable pressures in that well.

Q. Now, will you please read into the record an example of how you determined the condition percent of a gas well presently producing from one horizon, but which has in the past produced from another additional horizon, which has been depleted.

A. Well No. 1425 was drilled in 1909. It produced from two horizons, the upper horizon being the Indian and 30-foot sands, which have been exhausted and are taken in 1938 as being in zero condition, there being no more working pressure.

The fifth sand, which is the lower horizon, with a 30-pound abandonment pressure showed an original rock pressure of 855 pounds, with a workable pressure of 825 pounds.

939 The 1938 test showed 300 pounds of work pressure, with a remaining workable pressure of 270 pounds. This remaining workable pressure was 32.73 percent of the original workable pressure. The average of the zero and the 32.73 percent, namely 16.37 percent was taken as the percentage of the remaining workable work pressure in that well.

Q. Mr. Rhodes, are the pressures to which you have referred gauge pressures above atmospheric or absolute pressure?

A. They are gauge pressures above atmospheric measured by the ordinary pressure gauge.

Q. Now, if you will please turn to page 3 of your Exhibit 21, you state that the percent condition of each well was determined as the numerical average of the percent conditions of the sands in that well. Does such a measure give any consideration to the proportionate amounts of gas in the various producing sands?

A. It gives no consideration, but it is practically an impossibility to determine how much gas was actually contained in any of the sands that feed in the well. We found in some instances that wells with many sands, that a sand came in as a producing sand, but blew out very quickly, that sand being one of
940–941 little or no gas in it. That was ignored in the computation, so to that extent we took no account of sands which had so little gas behind them that they blew out quickly.

Q. Let us assume that a gas well has 80 per cent of its gas in one producing sand, and 20 per cent of its gas in another producing sand. If all of the gas containing the 20 per cent has been exhausted, the condition of the well under your method would be in 50 per cent condition, isn't that correct?

* * *

The WITNESS. The premises are not sufficiently complete to enable me to answer it. How much gas is in the sand that contained the 80 per cent of the gas?

Mr. SPRINGER. I think that is in the question.

By Mr. SPRINGER:

Q. All of the gas is in the 80 per cent producing sand.

A. Under those circumstances, which are impossible to exist in practice except in a well which has been exhausted in one sand and then drilled deeper to another sand, our figures would show fifty per cent for that well, and that is one of the reasons why I say that these per cent conditions which we referred
942 to as individual well per cent conditions, are really not that, but that when you take an average of a lot of wells,

3,300 wells, you will find just as many wells running one way as the other, some with the big sand fairly well exhausted and the small sand with the high pressure, and vice versa, so that, as related to the wells of the whole, this ratio of the rock pressure gives an accurate and the best available information as to the condition of the Company's wells.

Q. If we assume the reverse to be true, and the sand containing the 80 per cent of the gas has been exhausted and 20 per cent still remains in the other sand, then again, under your numerical method, you would find that well in 50 per cent condition?

A. That is right. There would be as many of the one kind of wells as of the other kind.

Q. Now, will you please turn to page 4 of your exhibit. You indicate that you studied 512 wells retired during a ten-year period. What check did you make to determine typical wells and geographical areas of existing wells?

A. I merely took all of the wells that the Company had retired in a ten-year period, and based my figures wholly on the records contained in the Company's books as to the salvage from those wells.

943 Q. But did you relate them to see whether they were typical to existing wells?

A. That is practically an impossibility. 500 wells represents about 200 miles of casing and tubing, and I think that 500 being about one-sixth or thereabouts of the total wells, may reasonably be considered as typical of the present wells. If I had gone back more years than ten years and added more wells than 500, I would have had a larger salvage value.

Q. Did you make that study?

A. Yes.

Q. Why didn't you use it in this exhibit?

A. Because I wanted to use a salvage value which was typical of the most recent of the wells abandoned.

Q. Do you know whether or not the abandoned wells were in one area of the Hope system?

A. I did not check specifically where they were. I know that abandonments currently are taking place pretty much all over the system.

Q. You state that during a ten-year period ending 1938, the Hope Company retired the 512 wells and recoveries amounted to 61.6 per cent of the total book cost. Do you know what the average age of those 512 wells was that they retired?

A. No.

944 Q. Do you know what the physical condition was of the casing and tubing in those wells?

A. No; only some of them. We know the physical condition of most of the seventy wells that were retired—that seventy wells of which we know the physical condition were retired in 1939. I do not know the physical condition of the casings retired from the 512 wells. I considered the condition of the casing retired from the 1939 wells as typical of those of the 500.

Q. Did you determine the physical condition of the tubing and casing that was originally installed in those 500 wells, to ascertain whether it was new or used?

A. There is no way of ascertaining that in practice.

Q. You mean the Company does not know whether it installs new tubing and casing or uses used tubing and casing?

A. Yes; the Company knows at the time, but records are not kept whereby it could conveniently be determined, and as I saw it, it had no part in the picture whatsoever.

Q. You do not know the relationship between the amount of new tubing and casing and used tubing and casing that went into the 512 wells originally?

A. No; except that the company's casing and tubing which it puts into the wells, in most cases, was originally purchased
945 by it as new tubing and casing. It might have been in another well before it went into this well, the exception being where the wells themselves have been purchased from some other company.

Q. Do you know the average age of the Company's casing and tubing in the Company's existing wells?

A. I do not.

Q. Do you know that the Company's wells in the aggregate have an average age of about 25 years?

A. I think that is approximately correct.

Q. Have you made a study of the Company's records with regard to the average price per ton that they have received for well equipment sold as junk or otherwise?

A. No. I was concerned with their records merely with the amount of money that they received from the sale of all materials that they recovered from wells, that they did not think was suitable to use again.

Q. Do you know that at the time that a well is abandoned by the Hope Company, that the casing and tubing that is recovered

for sale as junk has a price placed on it of one half a cent per pound or $10.00 a ton, pending the sale of that pipe?

A. I do not recall how they do it. I merely know that the records show year by year that they received from salvaged material, junked, a certain amount of money. Corrections
946 are made from time to time for any discrepancies as between what might have been accrued and what might have been received, so that over a period of years, any over or under accruals as to the price on junk is entirely wiped out for all practical purposes.

Q. Do you know what price per ton the Company received for casing and tubing sold as junk?

A. No.

Q. Do you know what became of the equipment that you described as being sold otherwise, on page 4?

A. No.

Q. On page 4 you state that 38.4 per cent of the original cost of well equipment was either left in the wells or sold for junk. Can you state the percent of original cost that was abandoned or left in the well?

A. I don't know it.

Q. You don't know whether it was 5 per cent or 10 per cent?

A. I do not.

Q. What per cent of the total book cost of the casing and tubing recovered was sold as junk?

A. I don't know.

Q. Could you give us the book cost per ton for the casing and tubing when it was installed in those 512 wells
947 that you analyzed?

A. I don't know it now. The books will doubtless disclose it.

Q. Is it about $70.00 a ton?

A. I don't know. I have given no thought to it.

Q. In connection with your study of the salvaging of these 512 wells, did you determine whether the book cost for casing and tubing equipment approximated the original cost for new materials, or whether they represented a depreciated cost when used materials were installed in the wells?

A. I made no investigation. I concerned myself merely with the company's records as related to the 512 wells most recently abandoned.

Q. You further state on page 4 that the Company was able to recoup 11 percent of the total book cost of all of the equipment by selling tubing and casing as junk, isn't that so?

A. No; I say "or otherwise," In some cases, tubing and casing is sold that other people use rather than sold as junk.

Q. On page 4, you state that 38.4 percent of well equipment was either abandoned in wells or sold as junk?

A. No; I say "or otherwise."

Q. And from that 38.4 percent, your study indicated
948 that 11 percent of the total book cost of all equipment originally in the well was recovered?

A. Of that part; yes.

Q. If no casing and tubing were left in the hole, but it was all recovered and sold, what is the indicated percent of gross salvage value for this material, according to your figures?

A. About 25 percent.

Q. Do you know how much per ton?

A. No.

Q. Then you said, following your method of determining salvage value of casing and tubing, if only 11 percent of the well equipment out of the 38.4 percent was recovered for sale as junk, the effect would be realizing 100 percent of the book cost on property sold as junk?

A. That is mere arithmetic and apparently correct.

Q. Well, errors are not made in arithmetic?

A. No; but some of the equipment recovered from the wells is sold for purposes other than junk.

Q. Do you know how much, and for what purpose?

A. No; I have no records in detail.

Q. Mr. Rhodes, will you please assume that 38.4 percent of the equipment was recovered and sold for junk or other-
949 wise, and assume that you would receive 11 percent of the book value for this junk, how much would this be per ton?

* * *

The WITNESS. Nobody can answer that question.

By Mr. SPRINGER:

Q. If we change the last word "junk" to "material" it is possible to determine that, is it not?

A. No.

Q. Would it not be possible to determine the price per ton received for the material sold?

A. If you knew the book cost, but I do not know the book cost.

Q. I gave you the book cost at $70.00 a ton.

A. I don't know whether that is right or not, because this junk, so-called, that you assume to be junk, which is not junk,
950 includes valves and fittings, which cost very much more per ton than casing and tubing.

Q. Are valves and fittings a large portion of the total of material?

A. Not a very large portion, but nevertheless they enter into the question, and when those things are sold they can be sold at a higher price per ton than junk casing and tubing.

Q. Is it customary to throw that, the valves and fittings in the same pile with casing and tubing when sold as junk?

A. Sometimes. I say the sales are made otherwise than for junk.

Q. Is it not true, Mr. Rhodes, that your junk credit here to well equipment, if excessive, would be in effect placing this property in an artifically higher percent condition?

A. That is purely an assumption. I think if the Company's records of the most recent 500 wells abandoned is the best evidence in the world of the salvage to be taken. I might have gone back and taken 1,500 wells which might be considered as better evidence, and then I would have had a higher salvage value, but it still would be a correct record of the 1,500 wells. I tried to show and to use the lowest salvage value justified by the Company's records, without attempting to theorize as
951 to about how much this junk might weigh and what it might be, but I don't know what it might be and how much I might get for it.

I am basing this absolutely on the records of the Company for the period which gives the lowest salvage value, and then I inspected the material recovered to find out whether or not the material went into the warehouse at a value equal to its book cost or some other value.

Q. Do you mean to give the impression that in future the salvage value of abandoned wells will be less?

A. I think it might reasonably be expected to continue at the level of the most recent period.

Q. On page 4, you state that you inspected equipment recovered from 70 wells abandoned during 1939, to determine the condition of the casing and tubing at retirement. What percentage of book cost was recovered from these wells?

A. I did not investigate.

Q. Do you know how much was junked?

A. No; I was concerned only with that material that went back to the warehouse as useful material.

Q. And you do not know the average age of the casing and tubing of those 70 wells either?

A. No; it could not be determined.

Q. It could not be determined?

952 A. No; because the Company uses its casing and tubing over and over again. Sometimes in the cleaning out of a well the casing and tubing is removed, and parts of it are put in new, parts of it may be put in with used casing and tubing, and there are any number of conditions that exist so that it is practically an impossibility to determine the actual age of the material removed from any well.

Q. Is that because of the lack of records?

A. Presumably so; yes; but the Company is not concerned with matters of that kind in its operations. It does not need to know, and there may be records existing, but I rather doubt it.

The TRIAL EXAMINER. Why would they put in new casing or tubing in a case like that?

The WITNESS. I don't know that they do, but they might, under certain circumstances. If they had a well which they pulled, in which most of the casing and tubing is in very excellent condition, and some parts of it are badly corroded out, they might well feel that in those locations where corrosion is very severe, they might want to put in a new casing and tubing when they put in the new equipment in the well.

The TRIAL EXAMINER. They would not save that, then, and and put it in somewhere else? The casing and tubing 953 that they had taken out?

The WITNESS. In general, they put back the casing and tubing that they take out of a well, but parts of it they do not put back because it is corroded or otherwise damaged in getting it out of the well. I merely pointed out in reply to your question that they might put in new material in places where the corrosion was very bad and in other cases it would be perfectly satisfactory to replace the damaged casing with casing out of the used casing stock.

By Mr. SPRINGER:

Q. Would the age of the casing and tubing have a direct bearing on the amount of the depreciation?

A. A rather indirect bearing as related to the casing and tubing restored to the warehouse.

Q. I mean, in the determination of the condition percent of the casing and tubing in existing wells, does the age of that bearing on the amount of the depreciation?

A. I would not say that it had, but there would be no way of finding out what the condition of the casing and tubing is in any well without pulling it out at a cost of $1,000 or so. It is a thing that cannot be determined; therefore, as I say, it is hypothetical.

954 Q. That you would say that physical deterioration which is visible from the casing or tubing that has been removed from the wells is your test of condition percent, regardless of the age of that casing or tubing or casing and tubing in existing wells?

A. It is my determination that the percent condition of that part of the casing and tubing removed which they put back into the warehouse.

Q. You do not give any consideration as to age?

A. It does not enter into the problem at all. A piece of casing that is practically as good as new, it does not make any difference whether it is two years old or forty years old. It is a perfectly good piece of casing or tubing. Age does not make any difference.

Q. You have taken the condition obtaining from an inspection of the equipment taken from 70 wells, and have extended this to 3,300 wells now owned by the Company, is that correct?

A. That is correct.

Q. Have you prepared an estimate of how old these 3,300 wells will be when they are abandoned?

A. No; I have made no attempt to do that.

Q. On page 4 you state that the recovered casing and tubing from 70 wells was depreciated by corrosion not more than

955 ten percent, and that an additional 2 percent of depreciation covers the loss through damage to threads, and so forth. Is that a determination of 88 percent condition for well equipment?

A. No.

Q. How do you reconcile those figures?

A. That is the determination of an 88 percent condition for that part of the well equipment which went back into the warehouse for re-use by the Company.

Q. Have you used that 88 percent condition for recovered well equipment throughout your exhibit 21?

A. I have applied it to the 61.6 percent recovery that went to the warehouse for re-use and determined the depreciated cost of the wells on that basis.

Q. Do you say that the recoverable equipment from wells will be in 88 percent condition, regardless of age?

A. Yes.

Q. On page 4, you explain in detail your method of placing salvaged casing and tubing conditioning on this equipment of 90 percent.

A. That was determined in exactly the same way that the condition percent on the underground pipe was determined. The explanation, if it is to be made in detail, should be made for all pipe as given, and equally applicable to all pipe.

956 Q. Do you have those working papers in convenient form?

A. The working papers are here and they are not in such form as would be reasonably possible to read into the record the method of determining the percent condition.

Q. Would it be possible to have them prepared as a supplementary exhibit? They are not relatively voluminous, are they?

A. To place them into condition so that they could be understood by the layman would be a rather difficult task, because they involve the use of mathematical equations which are quite complex in determining the ratio of elapsed age to the age expectancy of that particular material. To calculate the thing practically, involves the use of logarithms and X potential equations, and I do not know how to write that so that it could be understood by the nonmathematical layman.

Q. We would like to have that put in as a supplementary exhibit, and we will work it out.

A. I don't think it can be done so that it will be at all understandable to the Commission or to anybody else.

Mr. SPRINGER. I believe that the Commission is entitled to know the computations behind the conclusions in this exhibit and

957 the supporting detail, and I am sure that the Commission has experts on its staff who can fathom the working papers, and it is vitally important that we have that information so that the statements in this exhibit will have meaning.

* * *

962 Q. Will you please state, Mr. Rhodes, whether or not your method of determining depreciation of property is by major pit depths on the outside?

A. Basically; yes.

Q. Did you consider the pitting on the interior of casing and tubing in making your estimate?

A. No. It is not an important factor in the depreciation of casing and tubing.

Q. Is there not a water condition present in casings and tubings?

A. The casing is to keep the water out. It is exposed on the outside.

Q. There is not any water that gets inside, either casing or tubing?

A. By accident; yes.

Q. Have you taken into account the probability of deeper pits occurring in a joint of pipe beyond those tabulated by your inspectors?

A. I have taken into account the probability of deeper pits in various lengths of pipe.

Q. Between the points of inspection?

A. Yes.

963 Q. How did you make that adjustment?

A. I made the adjustment by the use of a form of equation that has been promulgated by the United States Bureau of Standards.

Q. And you employed that in your working papers?

A. One form of those equations was used in this determination.

Q. Could you give us the official designation of that Bureau of Standards work?

A. It was contained in the United States Department of Commerce National Bureau of Standards Research, paper No. R. P. 1171, entitled "Engineering Significance of National Bureau of Standards Soil Corrosion Data, by Kirk H. Logan."

Q. Do you know, Mr. Rhodes, that some of the tubing and casing which you mentioned here, and which was inspected by your men at the Federal Power Commission's engineers' request, that there were holes entirely through the pipe?

A. I do not doubt it.

Q. On page 4, have you used your gross salvage figure of 65.2 per cent on all of the wells now owned by the company?

A. I have used it to the aggregate cost of all of the equipment in all of the wells in the total, not individually.

Q. Now, will you please turn to page 5 of your Exhibit.
964 You state that in arriving at the cost of abandoned wells, you have studied the cost of 286 wells. Why didn't you use the 512 wells on which you made the study of equipment recovered?

A. Because of the amount of work required to extract from the company's records, the information, and the variations in this cost from year to year is very small, and the three or four years record which we have, I deemed to be adequate as the measure of the cost of abandoning the wells.

Q. Are these 286 wells typical of the present existing wells owned by the Company?

A. I considered them so to be.

Q. What kind of check did you make to determine that?

A. The fact that the cost of abandoning wells varies very little from year to year, and the kind of well has comparatively little to do with it. The costs are largely fixed by the fact that you have to move in there. A large part of the money is spent in getting in there to do the work, and the actual work itself does not represent so much.

Q. You did not check the location and depth and characteristics of those wells?

A. No; I merely took the Company's most recent experience in the abondonment of wells.

Q. Could you state the conditions which were considered
965 as to the abandonment of wells?

A. Wells are abandoned almost entirely by following a program which I will now outline. The well, because of its operation, gets into trouble and needs repair. The need of repair may be due to caving rock or water or leak in the casing or what not, but commonly the indicated need of repair is the failure of the well to produce gas notwithstanding the fact that it has a considerable rock pressure.

When a well gets into that condition, as some two or three hundred do per year, the company moves in generally with a portable well-cleaning outfit and goes to work on the well and cleans it out.

It has to pull the casing and tubing, and it has to break up and remove all of the debris in the bottom of the well. It cleans it out.

Sometimes they even shoot with dynamite or nitroglycerin in an attempt to clean it out.

If the well is successfully cleaned out so that it will continue to produce gas in the future, the well is restored to service. If the well, after being cleaned out and repaired, is not a successful producer any more, it may be abandoned or it may be drilled deeper to a new sand, but the cause of abandonment in any case is the final determination that the well will not produce any more gas.

966 Q. Could you state the conditions which tend to increase the abandonment costs?

A. Accidents in operation are the most prolific cause of higher costs, and the fair proportion of which is represented in these two hundred and eighty-six wells.

Q. The depth of the well would contribute to the abandonment cost?

A. Comparatively little.

Q. The geographical location?

A. As it affects the difficulty in getting in, only.

Q. On page 5 you have determined that the average cost of abandonment of the 286 wells was $898. You have also stated that this amounts to 27.2 per cent of the reproduction cost new of the well equipment. Is that 27.2 per cent on a per well basis, regardless of quantity and value of the equipment in the well?

A. That 27.2 per cent is the ratio of $898 to the average reproduction cost new of the well equipment per well.

Q. This cost of abandonment is expressed as a per cent of the reproduction cost new of the well equipment?

A. That is correct.

Q. This 27.2 per cent of the reproduction cost new of well equipment is then deducted from 65.2 per cent of the
967 book cost to produce the 38 per cent which you have used as the net salvage value of well equipment?

A. No; it is not.

Q. Will you explain how you made that computation?

A. The 27.2 per cent is subtracted from 65.2 per cent to get the 38 per cent. We are talking in terms of reproduction cost, not of book cost.

Q. That is just what I said, Mr. Rhodes.

A. I thought you said book cost.

Q. You have used 27.2 per cent based on reproduction cost and 65.2 per cent of book cost?

A. The 65.2 per cent was arrived at by a study of book costs, but in determining the net salvage, I subtracted the 27.2 per cent abandonment cost in terms of reproduction cost from 65.2 per cent salvage in terms of reproduction cost.

With the percentages of book cost in the numerators and the denominator of the fraction, it wipes out.

Q. You have not used original cost percentages and original cost new percentages in this calculation?

A. The percentage of 65.2 per cent was arrived at by a study of book costs but dollars salvage was in book cost in the numerator and the dollars of book cost of all of the equipment is in the denominator, and when you divide one by the other, the
968 book costs disappear. If the dollar salvage had been expressed in reproduction cost and if the total cost had been expressed in reproduction cost, it had exactly the same salvage percentage.

Q. Will you please divide the $898 which appears on page 5 of your exhibit, into the book cost instead of the reproduction cost and give us the per cent?

A. I do not have the book cost of these wells.

Q. Do you think that the answer would be 27.2 per cent?

A. I don't know what it would be, but the $898 is the current cost of abandoning wells, and the reproduction cost new is the current cost of equipping the wells. The ratio of those two is properly made. Some other ratio may or may not be applicable.

Q. Have you been consistent in using reproduction new percentages and original cost percentages?

A. I have consistently used the percentages set forth in this exhibit in determining the condition of the wells.

Q. And if this 27.2 per cent is increased to say 40 per cent, the total depreciation would be correspondingly greater, would it not?

A. Yes; the salvage value being less, the total amount of depreciation arrived at through depletion would be greater.

Q. You state that when a well is fully depleted, the loss in equipment is only 62 per cent of the total equipment
969 cost. Is that the maximum depreciation?

A. That is the whole depreciation that takes place in the well equipment itself on the average as related to all of the Company's wells. Individual wells may have quite different ratios.

Q. Could you explain how you arrived at the 57.4 per cent condition for the gas well equipment?

A. The result is most easily and simply explained as follows:

The total depreciation in gas well construction, which is the labor of installing the equipment and drilling the well, is the depreciation down to zero—68.7 per cent.

The gas well equipment, however, only depreciates 62 per cent down to the time when it is removed, and therefore the total percentage depreciation in gas well equipment is 62 per cent of the total depreciation in gas well construction. This gives 42.6 per cent as the aggregate percentage of depreciation in the gas well equipment due to depletion. The corresponding condition is 100 per cent less this figure, or 57.4 per cent.

Q. Mr. Rhodes, you have determined the accumulated depreciation in gas well equipment as being in the same proportion and determinable upon the same basis as well construction.

970 A. It is determined on the same basis, yes; but it recognizes 38 percent net salvage as compared to the zero salvage in the determination of the drilling of the well.

Q. Does your determination of accumulation of depreciation of gas well equipment give any consideration to the age of the gas well equipment?

A. No.

Q. Mr. Rhodes, did you give any consideration to service capacity in determining the present condition of the Hope property, especially pipe lines and compressor stations?

A. What do you mean by "service capacity"? That has no real meaning to an engineer.

Q. Service capacity is defined as "the total output of the utility plant realizable during its service life; measured in uniform units of measure, either in number of years of service, number of working operations performed or other production factors, as appropriate. A unit of property may possess more than one capacity for service, and the capacities may be reflected in more than one unit measure. The evaluated composite of those abilities controlling the service life of the property then reflect its total service capacity."

You did not consider that, did you?

* * *

971 By Mr. SPRINGER:

Q. If a pipe line originally carried 15 wells and now carries 3—the same size—has it experienced any loss of service capacity?

A. No.

Q. Why?

A. Because it is still needed to carry the output of the three wells, and in the production of gas, particularly in fields where the field pressure is low, large pipes are very desirable.

Q. Did you use the group plan in computing percent conditions?

A. I computed percent condition from a practical engineering standpoint and not from the standpoint of the accountant, which is nothing more or less than amortization.

Q. I believe that you did in your study group pipe lines in your determination of condition percent?

A. Yes, I did. But the term "group plan" as used by accountants, is a plan for amortizing investments. Naturally I determined the condition of these wells as a group—not individ-
972 ually. The condition of the pipe lines as a group; the condition of the equipment as a group; and I used the group plan to that extent, but not in amortization.

Q. Mr. Rhodes, to inquire about the percent condition of certain property, will you please refer to Exhibit 16, Part C, page 9. In your inventory of tubing and casing by districts, you have listed line pipe. What is the function of the three-inch pipe which is listed as the line pipe, and can you from your working papers tell what price was applied to this particular pipe?

* * *

The WITNESS. As to the first question, I have not investigated the specific function of the large list of sizes of tubing and casing and line pipe. Out of several millions of feet of casing and tubing, there is 7,665 feet of three-inch line pipe scattered over the property. As to the pricing of it——

By Mr. SPRINGER:

Q. (Interrupting.) That is junked, isn't it, Mr. Rhodes?

A. No. It may be a drip or a separator or a drain to
973 get water away from the well, or a cistern in cases where the oil is being produced.

Q. Will you refer to the operating districts, and is it not true that thirty to fifty percent of the Hope Company's wells are cased with 6⅝th and 5 3/16th-inch casing?

A. There are so many pages of this, that I would not want to express any opinion as to what proportions are cased with one or the other, but page 9 shows the exact footage of all of the different sizes, showing that 6⅝ casing is the predominant size.

Q. Why is it necessary to have both of these casings, 6⅝ and 5 3/16 inch, in these wells?

A. In some cases, there is production between the two. In some cases the 6⅝ inch may extend down to a certain depth as necessary in drilling that well, and it had to be left there, and after drilling by there, the 5 3/16th inch would be continued to the bottom. There are so many different possible causes of there being two lines of casing in a well that it would be futile to attempt, with respect to any well, to say what it was in there for, without an investigation and consultation with the operating department.

Q. Mr. Rhodes is it practical to produce gas through the space between a 6⅝ and 5 3/16 inch casing?

974 A. It could be, but——

Q. (Interrupting.) What is the clearance?

A. It does not take much clearance to pass small amounts of gas produced by wells in this country.

Q. The clearance of about an eighth or a quarter of an inch would not be practical?

A. It could produce gas; yes. It is not a considerable area, but it is not necessarily installed for that purpose, as I explained before. Wells are drilled and cased with a large casing down to a certain stratum, and then a smaller casing continues down.

Q. Are there other reasons, such as that the 5 3/16-inch casing is sometimes used as liner pipe for the 6⅝ inch casing which has deteriorated to the extent that its usefulness as a producing string has vanished?

A. Yes. In those cases, however, we have not included the string that is useless.

Q. This dual casing arrangement occurs mostly in the older wells, does it not?

A. Yes; it is more likely to occur in the older wells.

Q. Now, Mr. Rhodes, will you please turn to page 5 of your exhibit 21 at the topic of the depreciation accumulated in pipe lines. Did you use the inspection reports on pipe corrosion

975 made for the 1931 East Ohio-Cleveland case?

A. No.

Q. You did not rely on that at all?

A. No.

Q. On page 6, is it true that the geographic spacing of points of inspection of the new pipe lines constructed since 1931 were chosen at reproduction cost new, $20,000 intervals corresponding to those used in the 1931 inspection. That is correct, is it not?

A. These intervals of a given size were the same as the intervals of cost of $20,000, in the earlier locations.

Q. Is it true that the geographic spacing of points of inspection of the old pipe lines constructed before 1931, were chosen as reproduction cost new dollar intervals corresponding to about three or four times those used in the 1931 inspections?

A. Along the long, large lines in which we were most interested, every third one of the 1931 locations was taken, so that in general they were separated at $60,000. intervals in terms of the old approximate figures.

Q. And does not your sampling method result in inspection density on the new pipe lines three to four times that of the old pipe lines?

976 A. That is correct, but in determining the overall picture of relative density of inspections, that is properly allowed for by weighting.

Q. How did you weight them?

A. We weighted them in proportion to the spacing, in other words, those inspections that represented four spaces were given a weight of four, those that represented three spaces were given a weight of three, and those that represented one space were given a weight of one.

Q. That is in your working papers also, isn't it?

A. Yes; that is the working papers.

Q. And you gave no consideration to the age of the pipe?

A. Consideration of the age of the pipe in the principal trunk lines where the age was definitely known was given in determining certain of the factors that enter into these equations which I have previously mentioned.

Q. When you summarized your calculations on pit depths in the pipe lines at the various locations, were the averages you developed for the system as a whole arithematically determined, or did you state that they were weighted?

* * *

977 The WITNESS. The averages of the pit depths were summarized by sizes of pipe first and in making that summary the relative weights of inspections as to spacing, were reflected in arriving at the average pit depths representative, let us say, of 6-inch pipe or 8-inch pipe or 10-inch pipe. Then the contribution of each of the sizes of pipe to depreciation was determined and the overall picture was determined by weighting the contributions of the different sizes of pipe proportionately to the number of inspections on that size of pipe, so the averages were determined throughout by weighting.

Q. Did you make any attempt to determine the age of the pipe which you inspected?

A. Only as previously explained.

Q. Did you make any attempt to determine whether the pipe you inspected was pipe installed originally in that line or as replacement pipe?

A. Such an investigation was made in connection with the inspections of the principal pipe lines which were used for the purposes of determining the constants or certain of the constants in the equation.

Q. Did you make any attempt to determine whether the pipe which you inspected was new pipe or whether it was used or second-hand pipe when it was installed at the location which you inspected?

978 A. Only as related to the inspection on the major lines.

Q. If you will please refer to page 7 of your Exhibit 21. Will you describe how you measured the depth of the pits in the pipe inspected?

A. The pipe that was uncovered in the inspection pits was thoroughly cleaned of all rust, scale and so forth, for a distance or length of about four feet. The two center eighteen-inch sections of this cleaned section of the pipe were separately inspected. The determination of the depths of the pits was measured by a depth guage in common use for such purpose, but before the depths were measured, special care was exercised to clean the pits out thoroughly at the bottom, thus insuring a full measurement of depths. Approximately thirty pits were measured on each eighteen inch section, which were the thirty deepest pits that could be found by the inspector.

Q. Is it true that the surface of the pipe is sometimes corroded to such an extent that the original surface has vanished?

A. Very rarely.

Q. If it did occur, how did you measure the pit depths?

A. It occurs so rarely that it needs to be given no consideration. In general, the corrosion on this pipe is the result of an action which in corroding the pits, protects from

979 corrosion the surfaces that are not determining pits, so that it would be an unusual condition where the original surface of the pipe had disappeared, particularly in a case where the corrosion was bad and the pits were deep.

Q. But in such a case, would your method of measurement indicate the depth to which corrosion has penetrated below the

adjacent corroded surface, rather than the depth of the pit below the original surface which has vanished?

A. If there were no original surfaces, the measurements had to be made from such surface as there was, but the original surface was used, wherever it could be found and which is, I say, the common experience with the inspection of corroded pipe.

Q. What study did you make of soil conditions affecting pipe line corrosion?

A. We based our facts on the corrosion itself, as the best indication of the character of the soil. We made a great many observations as to conditions which might cause corrosion, which are used merely for the purpose of determining discrepancies and things of that nature, but the pipe itself, in the condition it is, is the best indication of the character of the soil as affecting corrosion.

Q. In arriving at your conclusions, did you give effect to the previous observations in the Cleveland case?

980 A. No; I paid no attention to that.

Q. Have you made any tests showing the acidity of the soil as affecting pipe lines?

A. No.

Q. What effect have you given to annual rainfall, ground temperatures and rugged topography of West Virginia, affecting depreciation of pipe lines?

A. All of the effects they had upon the pipe.

Q. Through what?

A. Corrosion.

Q. Through visual inspection?

A. No; through an extensive sampling of the five or six hundred test holes.

Q. Within a short period of time within which your inspections were made?

A. Yes. But the corrosion we inspected was of the pipe which had been subjected to the soil conditions, the weather conditions, the temperature, rainfall, and so forth.

Q. That is, assuming that your sampling method was all right?

A. The sampling method was adequate.

Q. Is it true that the presence of ground water or soil moisture contributes much to the external corrosion of pipe lines?

981 A. That is one of the things that contributes to corrosion; yes.

Q. You did not make any study of the extent that bacteria has contributed to corrosion?

A. I made no study of bacteria.

Q. Page 8 of Exhibit 21, please. You state that the rate of corrosion has been found to fall off with age?

A. Yes; that is the universal experience in corrosion.

Q. Would you say that where corrosion is being caused by electrolysis, that it increases with age?

A. We have no electrolysis as an important factor in these lines, and I doubt if it appears at all, but as a fact that is true, because even in the cities, the electric cars which cause electrolysis, have practically disappeared, so it is also true as related to electrolysis.

Q. Have you made a study to determine whether the Hope system has been subjected to electrolysis?

A. It obviously has not been subjected to electrolysis, being pipe lines out in the country, far removed from any trolleys, with the exception of a very small portion of the lines, between here and Weston.

Q. Do high-tension transmission lines affect pipe lines?

A. Not in the least.

982 Q. Is that so?

A. That is so.

Q. But assuming that electrolysis has attacked a pipe line, is it not a constant that does decrease with time?

A. That depends upon the electrolysis, but in this Company's property, the corrosion does fall off definitely with age. The inspection of the pipe line proves it beyond a shadow of a doubt.

Q. Did you take into consideration any interior corrosion in pipe lines in your determination of their condition per cent?

A. Interior corrosion is practically non-existent in pipe lines in this territory.

Q. Does sulphur-bearing gas produce interior corrosion of pipe lines?

A. Under some conditions.

Q. Do you know that sulphur-bearing gas has been produced in West Virginia?

A. It has been produced, yes; but it does not go into this company's pipe lines.

Q. But do you know that sulphur-bearing gas was transmitted in the Hope Natural Gas Company's pipe lines before its effect was detected and eliminated by treatment?

A. Oh, for a short time, but the action of sulphur
983 requires years to create any corrosion that you could even find.

Q. On page 8, when you state that the rate of corrosion decreases with time, have you used that retarding curve in arriving at your conclusion?

A. I have.

Q. On the per cent condition of the well casing and tubing and pipe line pipe?

A. I have used the same degre of retardation, which degree, as I have used it, is a lesser retardation than is actually experienced by the company, thus producing a calculated depreciation greater than would be the result if I had used exactly the company's experience.

Q. Is the development of that in convenient form in your working papers?

A. I don't recall what form that is in in the working papers. The rate of retardation which I have used here has been used by me because it is from the standpoint of depreciation the rate of retardation giving the highest depreciation which has been found on any of the soils east of the Mississippi by the Bureau of Standards in its tests. I was greatly concerned to find out whether or not this company's pipe lines retarded in corrosion more than
that convenient rate which I have used. If it is not in
984 the working papers, the data is there from which it could be readily obtained.

Q. As an example, will you take 6⅝-inch casing having an original wall thickness of 250 mills; by inspection it was found that the average of the deepest pits were 125 mills, and the average of the ten deepest pits were 115 mills. Will you please give the per cent condition that you would place on this pipe?

A. That calculation cannot be made on the witness stand, and furthermore you have not given me all of the data that is required to make the calculation.

Q. What else would you require?

A. I am asking you. You are asking me to solve the problem.

Q. Under your theory of retarding curve, even if penetration is 50 per cent through the pipe wall, you will find a per cent condition much greater, possibly 80 per cent, wouldn't you?

* * *

The WITNESS. You are not giving me all of the infor-
985 mation that is required to make such a calculation, and even if I had made the calculation, that, by itself, would be only one of the things that I would take into account in arriving at the final figure as to depreciation.

By Mr. SPRINGER:

Q. What other conditions would you like us to assume? We will work with you and help you solve the problem.

A. This calculation—if you will give me all of the conditions of the calculation, I will be glad to have it made up, but it would take at least half an hour to make out simply the calculation and assemble the necessary data.

The TRIAL EXAMINER. What are the necessary elements of such a calculation?

The WITNESS. First of all, he must tell me in how long a section these pits are found. Is it two feet or eighteen inches or twenty feet or what?

By Mr. SPRINGER:

Q. Pit observation made in 18-inch lengths extrapolate to twenty feet.

A. I will be glad to have the calculation made if Mr. Smith is here, or I could make it myself, but this kind of a calculation involves the use of log tables and so forth, of which I have none available.

Mr. SPRINGER. We would be very pleased to have him
986 furnish it at his convenience this afternoon, Mr. Examiner.

The TRIAL EXAMINER. Have you all the information you need there now?

The WITNESS. Yes. I can now apply this data to this modification of the Bureau of Standards formula, and I will give you the result.

By Mr. SPRINGER:

Q. Now, Mr. Rhodes, for the purpose of tracing your conclusions as to the retarding effect of age on the rate of corrosion, could you read from your working papers the results showing

the period of time necessary to reach entire penetration, if pits have penetrated one-quarter of the wall thickness in fifteen years?

A. I will be glad to have that calculation made.

Q. What per cent condition would you place on a transmission pipe in the Hope system if you had used the straight-line extrapolation rather than your retarding curve method?

A. I would not have used it. I would not use the straight line at all, because it is contrary to facts, and I cannot state what condition I would have placed on the property if I had used that method erroneously.

Q. You made such a study, did you not, on casing?

A. I had a calculation made on casing, as a matter of curiosity, to find out what the figures were, but I could not
987 use those figures in depreciating anything.

Q. What percent condition did you reach on that calculation?

A. I did not reach a per cent condition on that calculation. I just reached a figure that would result on certain assumptions contrary to facts, as a matter of curiosity.

Q. Was it not lower than the per cent condition that you used in this exhibit?

A. It was not a per cent condition; it was a calculation under certain assumptions, contrary to the facts and the experience of the Company. The calculation was not used by me at all.

Q. If you had used the straight-line extrapolation method instead of your retarding curve method, would that have resulted in a decrease of about 20 per cent in the per cent condition which you have placed on transmission property?

A. I don't know. I would not use it, because it would not result in any figures that have any meaning as to depreciation.

Q. Would not a substantial amount of money be involved in transmission main pipes which you have given a per cent condition of 79 per cent to, if that were varied one way or the other two per cent?

A. The result would be two per cent one way or the
988 other.

Q. Of $16,500,000 worth of property?

A. Yes; 2 percent of that amount of property is about $300,000 worth of property.

Q. Did you study the causes of corrosion on well tubing?

A. The causes of corrosion on well tubing are largely the same as the causes of corrosion on pipe.

Q. Referring to the field line experience of the Hope Company, do you know that more than two thirds of the field lines that have been constructed by the company have been abandoned and taken up?

A. No.

Q. Approximately 12,000 field lines have been taken up over the life of the Hope Company; did you know that?

A. Taken up or moved to another location?

Q. Taken up and some disposition made of them.

A. I don't know how many have been moved.

Q. You have not given effect to this rate of abandonment and net salvage from that, have you?

A. A reasonable reflection of the fact that field lines are moved from place to place with changed sources of gas supply is reflected in my adjustment to the percent condition of field
989 lines. It is amply reflected. It takes into account that fact, and it also take into account the reverse fact that in conditioning the laying cost of field pipe as the same as the pipe itself, I have overdepreciated all of the pipe lines that have been moved to new locations.

Q. Mr. Rhodes, in depreciating field lines, what consideration have you given to the gradual exhaustion of the connected gas supply?

A. That is a wholly indeterminate effect. I have studied the condition of the company's wells for some years in the past and find that they reached a condition many years ago which on the average is about the same as the condition which they have now, namely, between 30 and 35 percent. There is no evidence that in the aggregate the Company's wells or gas field are declining. Wells go out and new wells are drilled a short distance away. Sometimes fed by the identical line which was fed by the well which was abandoned. You will find places upon the system with almost every conceivable combination of new and old and abandoned wells.

Taking up of lines with the abandonment of wells is a pretty indefinite thing. I have allowed, I consider, for that, amply, in adding to the depreciation that I found by consideration of corrosion, an additional depreciation of 3½ percent, which is approximation, one-sixth of the depreciation from cor-
999 rosion. That I consider amply reflects all of the depreciation that exists in the field lines because of the fact that

some of them are moved from this place to that place as the wells are abandoned and new ones are drilled.

Q. Will you state your condition on well construction?

A. The percent condition on well construction which was based on reduction in rock pressure is 33.1 percent.

Q. Does that have any bearing upon the determination of the depreciation of gathering lines?

A. No determinable effect.

Q. I believe you said field and gathering lines are moved to new wells frequently, and you made some allowance for that?

A. Yes. I consider that any depreciation existing in the field lines because of that fact is amply reflected in my field line condition of 67.8 percent.

Q. When field or gathering lines are moved to new wells, the original labor and construction costs are lost because there is no salvage value other than the equipment itself, as the pipe enters its second cycle, isn't that so?

A. Yes. The labor is largely lost; yes.

Q. Those non-recoverable costs are depreciable with the pipe at the original location?

A. That is right, and I have amply reflected that fact in my adjustment.

Q. And your adjustment is a judgment figure or a
991 mathematical figure?

A. It is largely judgment, in that there is no methematical way of determining just how much depreciation exists in the lines. It is absolutely impossible with respect to most of the individual lines. It can be approximated as related to the whole system.

Q. Do you know what the ratio between labor and materials are on the gathering lines that are moved to new well locations?

A. About half and half.

Q. What do you figure would be the cost to salvage pipe lines?

A. About 15 percent of their total cost in place.

Q. In the case of pipe, other than casing and tubing, where have you given any effect to salvage *in* your exhibit on accrued depreciation?

A. In reaching my conclusions as to the percent depreciation on account of corrosion, I took into account the salvage value for re-use of the pipe. This system is essentially a continuing system which will last indefinitely, and when the pipe in a system

corrodes and has to be replaced, the pipe is re-laid in the same location. The actual cost of lifting the old pope and putting it back again, aside from the cleaning, is less than the cost
992 of laying the line in the first place, so that any pipe that is picked up and cleaned and reconditioned and re-laid, the total labor cost of that operation is the same as the total cost of originally laying the pipe, or practically so.

Q. Now, we have considered the salvage value of that pipe for reconditioning, taking into account the cost of cleaning it and the cost of welding up the deep pits, which are necessary, to make it re-usable. Those things are taken into account and arriving at the final figures which were arrived at as a matter of judgment as to what was indicated by this salvage as compared with carrying the pipe down to a complete depreciation without salvage. The percent condition of the pipe lines fully reflect salvage value of the pipe in re-use. Then you consider that the pipe line system will last through its physical life?

A. It will last indefinitely. There have been no important changes other than additions during the company's whole forty years of history, in its main pipe lines. I have further more increased the pure corrosion depreciation in transmission pipe lines by a further one percent to represent any other depreciation that might exist from other causes.

Q. Do you believe that there is an indefinite supply
993 of gas in West Virginia to prolong the life of the pipe line system?

A. There is no indication that would be a guide as to any future exhaustion of the gas supplies of the company. The company's reserves have varied up and down for a period of years, and they certainly are not indicative of a company that is on the way out.

Q. Wond it be thirty years or fifty years?

A. There is no indication of any period. In fact, the indication is that the gas available to this company, from some source or other will be available for an indefinite future period.

Q. I hope so. Did you conduct a field examination of the conditions of pipe removed from Line H-5757 of the Hope system at the time the pipe was lifted?

A. Such an inspection was made, but has not been worked up and has not been used by me in reaching my conclusions.

Q. You did not use any of the information secured from that examination?

A. No. I have not even seen it.

Q. That study is available in the working papers, though?

A. No; it is not. The working papers contain the information which I used. That information, so far as I know has never been worked up.

Q. Is it customary to make individual studies that are
994 not used in valuations, and then that cost to be charged in rate case expense?

A. One never succeeds in doing only that which is necessary to arrive at the results. I had the inspections made because I thought it might be needed, and I found as I progressed in my studies and regular inspections, that they were not needed and therefore they have not been used.

Q. Were they any different?

A. I have not seen them.

Q. On page 9 of your exhibit, will you explain the derivation of the 22.5 percent depreciation costs by corrosion of production system pipe lines?

A. That 22 percent figure was arrived at by the use of the equations which I have referred to above, in which there was taken into account the fact that the retardation of corrosion in the company's lines is such that doubling the age results in less than a fifty percent increase in the depth of the pits. That is one of the factors represented by the equations to which I have referred, which sometimes is called the time rule of corrosion. These equations also take into account the fact that the longer the section of pipe which is examined or taken into consideration, the greater will be the depth of the deepest pits. We
995 applied those equations covering this—you might call the length rule of corrosion and the time rule of corrosion to the observed pit depths in the field line pipes, size by size.

The Trial Examiner. Does that length rule apply only to a length of pipe or to the distance between inspection points?

The Witness. That applies to the length of pipe. Take, for instance, roughly speaking, we having examined pipe in sections 18 inches long—if we had found the depths of the deepest pits, we will say 100 mills, had we examined the lengths of pipe three feet long, we would have found approximately 110 and had we examined twenty foot lengths in full, we would have found possibly 135 mills. Those figures are just rough figures, for illustrative purposes.

Now, what might be found in the extremes between locations, that are a mile or more apart, we do not know. We do not purport to say that these equations can be extended to any such extent. We have merely reached the conclusion, which is concurred in by all of those who have studied this method of determining the condition of pipe, that a proper number of inspections, which is 500 or more in this case, or really a thousand individual pieces of pipe, thus give a fair average result that will very closely approximate that if you had two or three
996 or four times as many inspections, or if you inspected every foot of pipe.

There are cases of pipe where there is almost no corrosion at all between these inspection points, and there are other parts of the pipe which might generally be expected to be worse than anything we have seen. We can get only a fair sample for a reasonable cost. But to go back to my explanation now, if I may.

I had the observed results applied to the equations, and I determined the percent of progress to what I called an end point.

One end point was where, in 20 feet of pipe there would be one well-defined hole, and at the point of leaking. I had other determinations made with 40 feet as the unit, and another with 50 feet as the unit. Then, by the use of these same equations in the manner that could be mathematically worked out, I determined what the condition of the pipe would be on the average when it had reached the various end points of one well-defined leak in 20 feet, 40 feet and so forth, determining how many pits would be on the joint per average, which would need welding.

There has been a great deal of experience in welding up of pipe, and in re-laying it, and it is rather commonly accepted practice that if the pipe is welded up so that all pits greater than one third of the pipe wall are filled with material,
997 the pipe can be re-laid and used over again with substantially as long a life as it had in the first place.

There is a sound technical reason for that in that the corrosion begins on the pipe in general when the metal is clean when it goes in the ground, and the rust on the surface of the metal such as is down in those pits, has a tendency to protect it, in fact it is that rust which causes the corrosion of the clean pipes.

I took into account the cost of that welding and the reuse of the pipe to the extent that it was worth while. On the small

pipe it is not worth while, and on big pipe it is a very profitable thing.

These calculations were all made, and the final results were placed before me and they clearly pointed, in my mind, to 22½ percent as the extent to which this pipe had progressed towards deterioration.

By Mr. SPRINGER:

Q. That is also contained in that volume of working papers that will be necessary to understand this exhibit?

A. Those calculations are all there.

Q. Will you please explain the derivation of the 20 percent depreciation of the transmission system pipe lines caused by corrosion?

A. The method was identical with that which I have
998 just described for field lines.

Q. Where is there a difference of 2½ percent?

A. Because the transmission lines have not progressed as far towards complete depreciation as the field lines have.

Q. And how did you determine exactly that 3½ percent should be added for depreciation on production system pipe lines and that 1 percent should be added for depreciation on transmission pipe lines?

A. That is a judgment figure arrived at by a consideration of the extent to which depreciation can exist in these lines from causes other than corrosion. In the case of the transmission lines, there is little or no depreciation from other causes. In the case of the field lines there is a certain amount of depreciation that might be considered as such, because of the fact that lines are moved from location to location. The need of that adjustment being greater in the field lines than in the transmission lines is obvious.

* * *

999 By Mr. SPRINGER:

Q. Mr. Rhodes, I believe you have some computations?

A. They have been made, but I have asked to have them checked, so that there will be no question about it. I think they are right, but they are being checked.

Q. All right.

A. I have the figures now. Shall I furnish them?

Q. Will you read them into the record, with an explanation, so that it won't be necessary for me to refer to the former question?

A. The first computation that I was asked to make was in the case of 6⅝ inch casing having a 250 mill wall thickness, in which the average depth of the deepest pits in one and a half foot sections was 125 mills, and in which the average depth of the
1000 ten deepest pits in all of the eighteen inch sections was 115 mills. It was desired to determine the extent to which corrosion on this pipe had progressed to the point where there would be one well-defined leak in 20 feet. Is that the problem?

Q. Yes.

A. This casing, corroded in the manner indicated here, is decidedly unusual. Nevertheless, applying the formulas to these conditions indicates that the corrosion on this pipe has progressed 36 percent towards the end point.

The second computation that I was asked to make was in the case of the pipe in which the corrosion had progressed to the point where it had penetrated the wall to a quarter of its thickness in fifteen years, and how long would it take this corrosion to penerate the wall of the pipe. The answer to that is 160 years, plus.

Q. That is the total time? Not additional to the 15 years?

A. That is the total time; yes.

Q. Mr. Rhodes, do you have two summary sheets in your working papers, upon which this exhibit is based, entitled "Summary by accounts of observed depreciation adjusted for net salvage, special observations and adjustments by G. I. Rhodes?"

A. That which I have was that, and it is adjustments to include all other depreciations. I adjusted it so that it would
1001 correspond with the text.

* * *

1002 Q. Referring to Exhibit 22 for identification, Mr. Rhodes, will you please classify each type of the adjustments you have made to observed physical depreciation, and indicate the total amount of that class of adjustments?

A. The observed physical depreciation amounts to $30,991,039.

Mr. COCKLEY. That is on the basis of reproduction cost new? All of those figures?

The WITNESS. That is correct.

1003 Out of that total, approximately $22,000,000 was in wells. I am bringing out this difference because we made no adjustment to the condition of the wells.

The first adjustment made was to allow for the cost of salvage. In other words, adjusting observed physical depreciation where it reflected no cost of abandonment to the physical depreciation adjusted to reflect the net salvage value rather than gross salvage. This adjustment amounted to $247,043.

The second adjustment was to reflect special observed conditions, such as nonuse and company practice in retiring certain types of equipment already described by me, the total amount of which was $141,883. The last adjustment was made to reflect all other depreciation than that which could be seen, and amounted to $1,251,624. This brings the total amount of depreciation found in the property up to $32,653,183.

By Mr. SPRINGER:

Q. Now, Mr. Rhodes, will you please refer to Exhibit 21 for just a few more questions on pipe lines? It has been computed that you inspected 903 feet of transmission system pipe lines in arriving at the condition percent of the entire transmission system pipe line, which totals more than 5,000,000 feet, is that correct?

1004 A. That is right, approximately.

Q. Did you make a survey of the leaks in the pipe line system?

A. No; but I made an investigation and was informed that there were practically none.

Q. I believe there is an exhibit here that shows leakage in the system of about 4,000,000,000 cubic feet annually?

A. Perhaps there is.

Q. And is not leakage in a pipe line one of the factors which must be considered in determining the condition percent of pipe?

A. No.

Q. Why not?

A. Because leakage of a pipe line is not one of the things that causes retirement. When leaks occur, they are repaired. The leakage that you are referring to is the combined result of many, many things, and of which physical leakage is one. The word "leakage" being used in a broad sense to reflect the difference between the input and the output from the system. Every joint in a pipe leaks, to some extent. Even gas leaks through the pores,

of the pipe. Meter readings are measured on the different pressure bases, and under different measuring conditions, so that the so-called leakage of 4 billion cubic feet is by no means all
1005 represented by actual physical movement of the gas through the pipe walls.

Q. I did not mean to infer that that was a physical loss, but you say there is some physical loss of gas?

A. Oh, yes. Unavoidable physical loss of gas. When leaks occur from corrosion, they are found by the regular inspection of the line, and every summer a special effort is made to find all that have developed, including leaks in couplings and those leaks all are repaired, so that in the normal operation there are very few leaks that are leaks as such, to the extent that they could be found and remedied.

Q. Then you made no study to correlate the leakage of pipe lines to percent condition in this case?

A. No.

Q. Are you familiar with the properties of the Eureka Oil Pipe Line Company?

A. No.

Q. Do you know that they have a system of pipe lines in the territory which is served by the Hope Natural Gas Company?

A. By hearsay only.

Q. Do you know that the Bureau of Valuation of the Interstate Commerce Commission and the Eureka Pipe Line Company have agreed on a service life of 50 years for all of the pipe
1006 in that system?

A. No.

Q. Is not the ascertainment of condition percent about 99 percent judgment?

A. No; 99 percent experience in the study of pipe lines.

Q. Are you familiar with the Columbus rate case of the Ohio Fuel Gas Company, in which a pipe line inspection was made in the customary manner, and in 1929 the company engineers testified that the distribution pipe lines were in 83 percent condition. Five years later, in another rate case, the same engineers testified that the percent condition of the same pipe lines was 91, that it had not depreciated, in fact it had appreciated when it was five years later?

A. I am not familiar with the case

* * *

1007 Q. When you determined the condition per cent of compressor station equipment by inspection, I believe you have based it upon relative conditions of excellent, good, fair, and poor, isn't that right?

A. And bad.

Q. Were those judgment standards, based upon a comparison of the conditions existing in the Hope system, or by a comparison with like equipment new?

A. They were based upon Hope's own practice with respect to the retirement of those wearing parts in service, and their replacement, a bad condition indicating that that particular wearing part was soon to be replaced. An excellent condition indicated that physically it was in the same condition or substantially the same condition that it would have been if it had just
1008 been replaced with a brand new part. The intermediate conditions or rating reflected intermediate conditions that were based on observations and on the judgment of the inspector in consultation with the operators of the equipment, and their replacement records, the length of the engine hours per year, and things of that nature.

Q. What condition per cent did you give to exposed foundations?

A. I gave all foundations the same per cent condition as the units upon which they rested.

Q. In the case of the Bee Compressor Station where there are only two units and four foundations, what treatment did you give to the two foundations that are not used?

A. The same as to the others. There was no equipment on them, and being in zero condition, so were the foundations.

Q. How do you know that the arbitrary per cent condition which you placed on the buried equipment in the compressor stations reveals the actual depreciation?

A. It fairly and reasonably reveals that depreciation, in my judgment. The cost of exposing it and making an inspection was so great as not to justify the trouble involved, it representing a small per centage of the total cost on the investment.

Q. And you did not ascertain the age of that buried
1009 equipment?

A. No.

Q. Are you familiar with the Uniform System of Accounts of the West Virginia Public Service Commission for Gas Utilities, 1939?

A. Only in a general way.

Q. Especially its provision for the treatment of maintenance and depreciation charges?

A. Only in a general way.

Q. And have you considered maintenance in determining condition per cent of compressor station equipment?

A. To that extent, that a well-maintained engine is always in better condition than a neglected engine.

Q. Do you know that the replacement of a bearing or a piston of an engine is a maintenance item?

A. It generally is.

Q. Did you depreciate those items?

A. We depreciated everything that wears on the engine, to determine the extent to which it had depreciated.

Q. And your determination of the condition per cent was influenced by the condition of the parts of an engine, the cost of replacement of which is a maintenance item?

A. Those small parts to which you refer do not contribute very much to the cost of an engine. The big parts
1010 that affect the cost, like the cylinders, and things of that nature, are of relative long life, and what the policy might be with respect to making those changes, I do not know—for replacing those parts, but we have depreciated all engines to reflect all the wear and tear that exists in those engines, and then adjusted the total depreciation, as already explained.

Q. I believe you mentioned that thirty per cent of the engines were wearing parts?

A. As a rough figure; yes.

Q. And over the system, would that amount to a substantial sum of money?

A. Thirty per cent of the whole cost.

Q. And of course the replacement of those parts are maintenance items?

A. They may not be.

The Trial Examiner. Do you mean of the entire thirty per cent?

By Mr. Springer:

Q. Do you know whether they are, Mr. Rhodes?

A. That is purely a matter of accounting policy over which I have no control. The greater part of the 30 per cent are large items, which should be handled through depreciation. They represent such large sums of money.

1011 The TRIAL EXAMINER. What parts, would you judge?

The WITNESS. As a matter of maintenance—purely of maintenance?

The TRIAL EXAMINER. The portion of it which should be handled through the reserve?

The WITNESS. I think probably four-fifths of it.

By Mr. SPRINGER:

Q. Mr. Rhodes, are you familiar with the list of retirement units in the uniform system of accounts for gas utilities of the West Virginia Public Service Commission for 1939?

A. In general.

Q. Can you find on that list of retirement units any of the items that you say are thirty per cent of the engines that are wearing parts?

A. No. This retirement list includes the whole engine itself as a unit of retirement, which considering some of the $50,000 engines which the company has, seems absurd, as compared with the 20 feet of two-inch pipe on the other hand.

Q. Or a bearing?

A. I consider as the proper retirement units the big things that enter into the construction of these large operating units.

1012 Q. Will you please turn to page 13 of Exhibit 21. How did you determine the condition percent of the meters and gauges, when the wearing parts are not visible?

A. The wearing parts, meters and gauges that have to be replaced, are of relatively short life. They represent a small portion of the total cost. Again, something in the order of thirty percent. In a system as old as this, it may reasonably expected that those wearing parts range all the way from brand new parts to parts that are just about ready to go, and I had in mind in using these figures as to physical depreciation that on the average we might expect to find those wearing parts about half gone.

Q. You did not ascertain the age of the meters and gauges?

A. It makes no difference how old they are. The wearing parts are old and replaced, and the meter is a new one, as the rest of the meter has not depreciated or worn out.

Q. Does the Hope Company have a large number of Tobey meters?

A. I don't recall the number, but a considerable number.

Q. Are such meters the most modern type of meters?

A. They are generally older than the meters—older than the other meters. They have been priced at a lower price
1013 than the meter that is now used, and they perform substantially as well as the newer types of meters.

Q. The Hope Company is not currently purchasing Tobey meters, is it?

A. No; they are not being made.

Q. Because of improvements that have been made in the manufacture of meters?

A. I don't know why they quit making them. Presumably there are better meters made which are cheaper to make. That in itself would account for the discontinuance of that type of meter.

Q. Will you please refer to page 16 of Exhibit 21. You say "It was agreed in both cases that those undistributed constriction costs to the extent of 11.51 percent depreciated with the company's property, and the Ohio Commission so found in the 1932 Akron and the 1937 East Ohio-Cleveland cases." By this, do you mean that 11.51 percent of the undistributed overheads are depreciable?

A. 11.51 percent out of the total of 17 and a fraction depreciated.

Q. How did you determine the depreciation of the depreciable portions of the overheads?

A. By applying 11.53 percent to the total depreciation of the property carried in the respective accounts.

* * *

5308 Cross-examination by Mr. SPRINGER:

Q. And your physical observation was of the poles in the communication system?

A. The physical observation was of the parts of the operating units of the property, poles and wire and everything relating to the communication system.

Q. Now, will you refer to the topic, Compressor Station Equipment, Line (g)? Do you know the company's experience with the Davis Station?

A. I don't recall specifically. Perhaps you will describe it more completely and let me know to what you are referring.

Q. Do you know that a study of the observed conditions of the Davis Station was made in the early 1930's?

A. No; at least I had nothing to do with it.

Q. It was made by your firm, but you had nothing to do with it?

A. Oh yes, the condition of the property was determined 10 years ago by my firm, but I had nothing at all to do with it.

Q. Do you know that the Davis Station was found in 75 percent condition by your firm?

A. No.

Q. Well, will you accept that and check me if I am
5309 wrong; and do you know that after that station was found in 75 percent condition, that it wasn't used, and that certain engines in that station were later abandoned, and that the salvage or junk value was $250 realized by the company, and it cost $600 to remove it?

A. I have been informed to the contrary, that the net salvage value obtained from junking those engines was about 8 percent of the original cost of them.

Q. Will you check that and bring in any proof that you can get and show the retirement work order on that?

A. I will endeavor to do so. May I explain this——

Q. (Interposing.) Well, there is no explanation necessary now.

A. Yes, there is this explanation necessary, because whatever may have been the percent condition found in the property at that time, was found in terms of depreciation as it was practiced at that time. I found it in terms of depreciation as determined and defined by the Commission at this time.

Q. It isn't strange to you that equipment in compressor stations would be found in 75 percent condition, and then within a few years go immediately to zero condition without any operation whatsoever?

A. Yes; I may be perfectly healthy today and dead tomorrow, and a station this year may be in perfect condition and as far as anybody can see will be used indefinitely, and something will happen during this coming summer which would shut that
5310 station down forever—and you can't tell that.

As related to specific pieces of property, you can't tell a thing, and you will note that I have placed a percent condition on the account, not on the individual pieces of property in the account.

Q. How do you figure a condition percent of an account?

A. In the same way that you figure any average. You take the——

Q. (Interposing.) You consider the components, of course?

A. I consider the composite result of everything in the account.

in the same way Mr. French did in determining the composite service lives.

Q. Is it your testimony that retirements of $926,000 represent property retired from gas service and junked or abandoned in connection with compressor stations?

A. No; I have merely stated that Mr. Dunn's figures show that so much property was retired and the losses were so much in the retirement of that property.

Q. Do you know that some of that was re-used?

A. Oh, yes.

Q. Then it becomes apparent that your figures aren't comparable with regard to salvage here?

Mr. COCKLEY. Comparable with what? I object to the question as not complete.

Mr. SPRINGER. Will you read my question, please?

5311 (The question was read by the reporter.)

By Mr. SPRINGER:

Q. By that I mean that you studied retirements of property which you admit had some units which were re-used, and you talked about salvage?

A. Yes.

Q. And Mr. French studied salvage only from retirements of property which was actually never used again. So your salvage figures aren't comparable with his?

A. Well, I have already explained that this surviving property involving a number of millions of dollars in my opinion will not, in the number of years Mr. French has said, go down to zero salvage. I can't conceive of the sudden drop from 45 percent in the past to zero in the future.

Q. But you can conceive of a sudden drop in condition percent from 75 percent to zero overnight?

A. As related to individual pieces of properties, yes, but not as related to a large group of properties costing many millions of dollars.

Q. Of course a group is the sum of the individual units of property?

A. Oh, yes; but the whole theory of depreciation as applied by the Commission applies to averages and ignores the individual items.

Q. Of course, that is not a very logical statement, is

5312 it?

A. Well, it is a fact.

Q. You mean that you can get a composite group rate by ignoring the individual?

A. You ignore the individual as an individual, but of course you take into account the effect of the thousands of individuals going to make up the whole population.

Q. Do you know what the percent condition was which you found for four gas engines in the Hastings compressor station?

A. I don't recall. The figure we found as related to those engines was found as a contribution to the composite over-all depreciation picture. I do remember that I took into account the use to which those engines were put, and the extremely low cost per horsepower of that station as a standby station.

Q. Will you furnish the condition percent of those four gas engines tomorrow?

A. I cannot do that because I did not find what I call the condition percent of those engines. I can find for you and produce the results of the physical examination of the men who studied the engines.

Q. We will present a photostat of your papers where you did make such a determination, to you tomorrow.

A. No; my determinations of condition percent, as I have
5313 testified more than once, were intended to apply to the account as a whole. As related to any individual part of the account, they are what you could see, and represent the extent to which that contributes, and you will also recall that after having added up and determined the composite, I made an over-all adjustment of the whole thing, not to any one particular station, and accordingly the figures as they relate to one station are not final figures, they are just a step to the final answer.

Q. Do you remember that your condition percent of the four gas engines was about 88 percent in your working papers?

A. No; I don't recall the figure.

Q. Do you know what the present age of those four gas engines is?

A. About 35 years.

Q. Mr. Rhodes, do you remember discussing the other day [5962] [5963] the percent condition of the four gas engines located at Hastings station, which I told you appeared in your working papers?

A. I remember your asking me about them.

Q. Well, I have photostatic copies of your inspection sheets, and will you identify them and tell us what condition you have shown on each one?

First, may these be marked for identification as Exhibits 123–A, 123–B, 123–C and 123–D?

TRIAL EXAMINER. They may be so marked.

(The documents referred to were marked Exhibits Nos. 123–A, 123–B, 123–C and 123–D for identification.)

The WITNESS. These are the field reports of my assistant who inspected these engines, and the figures shown on these as representing the purely physical condition of the engines are, with respect to No. 1–A, 85.6 percent——

TRIAL EXAMINER (Interposing). What exhibit is that?

Mr. SPRINGER. That is Exhibit 123–D.

The WITNESS. Engine 1–B, 85.8 percent.

Mr. SPRINGER. That is Exhibit 123–C.

The WITNESS. Engine 2–C, 88.3 percent.

Mr. SPRINGER. That is Exhibit 123–B.

The WITNESS. And engine 2–D, 88.8 percent.

Mr. SPRINGER. That is Exhibit 123–A.

The WITNESS. These being the physical percent condition
5964 representing the extent to which the engines have worn out in service.

By Mr. SPRINGER:

Q. You added 2 percent, I believe, to that physical condition percent, did you not?

A. Not to each station, I determined the physical percent condition, or my assistants did, with respect to all of the stations; I adjusted them downward to reflect the cost of abandoning; I then made specific further reductions on account of causes which are self-evident in some of the stations; and then the whole overall resultant percent was again reduced 2 percent without reference to any particular station.

Q. Then your physical condition percent, shown by Exhibits 123–A; 123–B, 123–C and 123–D for these four gas engines located at Hastings, is about 88 percent?

A. I think it would average about that; yes.

Q. And I believe you testified that those engines are about 35 years old?

A. Yes; they are rather old now.

Q. Do you know what percent of the time those engines are used?

A. Not specifically. I do know that they are used solely for peak load purposes, and I would expect it might average about 1 to 2 percent of the time.

Mr. SPRINGER. I offer in evidence Exhibits 123–A, 123–B, 123–C and 123–D as part of Mr. Rhodes' cross-examination.

5965

Mr. COCKLEY. May I see them?

(Exhibits handed to Mr. Cockley.)

Mr. COCKLEY. No objection.

TRIAL EXAMINER. Does the City of Cleveland or the State of West Virginia have any objection?

Mr. REEDER. No objection.

Mr. KOONTZ. No objection.

TRIAL EXAMINER: Exhibits 123–A, 123–B, 123–C and 123–D are admitted in evidence.

(Exhibits Nos. 123–A, 123–B, 123–C and 123–D were received in evidence.)

## TESTIMONY OF F. P. C. WITNESS DUNN ON DEPLETION AND DEPRECIATION RESERVE REQUIREMENT

**Transcript Pages 2993–3010, 3052–3124, 3621–3699**

* * *

2993 Cross-examination by Mr. MILDE:

Q. Is it correct to say, Mr. Dunn, that your summary sheet in this exhibit is Schedule No. 1 on page 23?

A. Yes; that is the summary sheet of all figures.

Q. Now I want to deal this morning only with the depletion figures, as you have worked them out.

Now generally, in your work as you said, you applied this information which was submitted to you to certain costs, did you not, to arrive at your figures for depletion and depreciation and depreciation reserves?

A. Yes, we have segregated the company's costs into two general classes, depreciable and depletable.

Q. Now I notice in your first heading on Schedule No. 1
2994 that you say, "Cost subject to depletion and depreciation", and your next line is "Original Charges per Books", which, for the total plant in column (b), is $73,500,000?

A. That is right.

Q. Just what is that figure?

A. That figure is not actually used in any of these calculations, but in order to present the total amount that we have considered over this period of approximately 40 years,—that is, it is the total dollars, but it wasn't used in any method as such, and has no significance other than as a check for adjusted book costs at December 31, 1938; but it was not used in any calculations.

Q. That is just for general informative purposes?

A. That is right.

Q. And when you said before that you wanted to show the total dollars you were dealing with, does that mean the dollars that the company happened to capitalize on its books, is that what that figure means?

A. Yes, sir; the total investment in plant accounts.

Q. That is, it is whatever part of the cost of the company's properties it had capitalized?

A. That is correct.

Q. And that is all that figure represents?

A. That is all.

TRIAL EXAMINER. During its entire history?

2995 The WITNESS. Through its entire history.

By Mr. MILDE:

Q. Now what does line 2, "Adjustments by Examiners," represent?

A. That is an amount of $1,043,329.44, and I believe in the written statement there is an explanation of that amount, exactly what it is composed of and what it means, and you will find that on page 8.

Q. All I am trying to find out, Mr. Dunn, is what that represents, because page 8 merely says that the examiners made certain adjustments and lists the amount; and I just wanted some further indication of what the figures are, that was all.

A. Well, if you will look on the summary schedule of the original cost exhibit, you will find every examiner's adjustment listed there, made to the original cost, referenced by entry numbers which serve to identify each adjustment, and this amount is $2,099,171.81.

Q. Are these some items that were on the books which were capitalized, which you deducted in the course of the examiners' adjustments?

A. If you will notice, this is the result of the original cost study made by the company, the result of the examiners' check of it, and most of these adjustments are adjustments prepared as a result of the company's original cost study, but not

2996 put on the books, and in the main represent unrecorded retirements at December 31, 1938, but many other adjustments are included in there, too.

Q. But mainly unrecorded retirements?

A. In dollars, that is the largest amount.

Q. Well, I was curious, Mr. Dunn, as to why you deducted that figure from your line 1 to show an adjusted total cost subject to depletion and depreciation in line 3 of Schedule No. 1?

A. Well, we are going to bring that adjusted total cost down to the adjusted cost at December 31, 1938, and obviously we are going to take out of there the property that we took out in original cost in order to come to that figure.

Q. Well, that doesn't mean that the company doesn't have that property capitalized on its books at one time, does it?

A. Oh, no; by no means. I am just going down to the balance at December 31, 1938, and as I explained before, this $1,043,000, having been included in the total of $73,000,000, has received its share of depletion expense and accrued reserve, and it is charged off against the reserve by our entries.

Q. Well, we will come to that a little later. But what you say on your line 3, as I understand it, is that you had deducted from the amount of cost the company had capitalized on its books over the course of these years, $1,000,000, which consisted largely of unrecorded retirements, and you come to
2997 $72,500,000 which you say is the adjusted total cost subject to depletion and depreciation. You don't mean to say that depreciation and depletion should not have been taken on the $1,000,000?

A. No; I didn't have that in mind at all.

Q. Wouldn't it have been a little more accurate to include that in your line 4, if you were just wanting to come down to your adjusted book cost?

A. Yes, possibly having two sections of line 4 would show company retirements as recorded, and then these additional unrecorded retirements. That would have been perfectly all right.

Q. Well, actually you don't use any of these figures on Schedule No. 1, do you, Mr. Dunn, except line 5; adjusted book costs; that is, that is what you are dealing with here?

A. I use them all in this way—that this is just a grand total of them. I use them annually, year by year; they are all used, of course, and they finally work out to the $51,207,000 which was the adjusted original cost at December 31, 1938, and I put that in there to provide a complete tie-in to the original cost statement.

Q. Well, but the annual depreciation and depletion rates which you are developing, and the adjusted depreciation reserve which was developed, are applicable solely, are they not, to your
2998 adjusted book cost as of December 31, 1938, or adjusted book cost as of 1937 or 1939?

A. Well, yes; as of December 31, 1938, they are applicable as to the cost as of that year; and as of any other year, to the cost at the end of that year. You must understand that Mr. Antonelli, in his original cost study, didn't attempt to make his costs retroactive. He merely took the property that he found at

the end of 1938 and adjusted that property without making any retroactive adjustments.

Q. I just want to clarify, Mr. Dunn, what you say on pages 1 and 2, where you say that plant costs have been depreciated and depleted, respectively. Now what do you mean by "plant costs?"

A. I mean the cost is recorded in what is ordinarily known as fixed capital accounts, which we have considered as being gas plant in service. There are several ways of describing plant costs. We have had several accounting systems in the past, so they fall into different account numbers, but in general it is what is known as fixed capital items.

Q. Well, isn't this true, Mr. Dunn, that what you mean in this exhibit by "plant costs" is that portion of the cost of the plant that the company capitalized on its books?

A. That is right.

Q. And as of December 31, 1938, as shown in your line 5 on Schedule No. 1, your plant costs show precisely the same figure as adjusted book costs of $51,200,000, isn't that so?

2999 A. That is right.

Q. Now going a little further down your Schedule No. 1, Mr. Dunn, I notice that you have this same adjusted book cost figure, or plant cost figure, repeated in line 55 under column (b) for total plant?

A. Yes.

Q. Isn't that so?

A. Yes.

Q. And there you call it "adjusted original book cost." There is no particular significance to your various terminology, I assume; it is the same figure, is it not?

A. The same figure and same meaning.

Q. And that is the adjusted book cost in line 55 just as it is in line 5?

A. Yes.

Q. And your next item there is adjusted depreciation reserves, in line 56, of $23,500,000 for total plant. Now that is the figure you are attempting to arrive at in this exhibit, is it not? I mean, that is the result of your calculations in this exhibit, and your supporting papers?

A. That is one result; yes.

Q. And the other result is your annual allowance?

A. Yes; that is correct.

Q. Now in line 57 you show a figure of $27,700,000 as net book cost. That is deducting from your adjusted book
3000 cost the adjusted depreciation reserve as you have determined it, isn't that so?

A. That is right.

Q. And is that net book cost the net book cost of the company's total plant as defined in the Commission's Uniform System of Accounts?

A. To what definition do you refer in the System of Accounts?

Q. Do you have your code with you?

A. Yes.

Q. Well, I have noticed, Mr. Dunn, that in the definitions on page 4 of the Commission's Classification of Accounts, Exhibit No. 58, there is a definition for net book cost, item 24, which reads:

"'Net Book Cost', when applied to gas plant means the book cost less related depreciation, amortization and depletion reserves. When applied to other property, it means book cost less related reserves for loss in value."

A. That is exactly the same.

Q. And that is what you have in this exhibit?

A. That is right.

Q. And by that you mean you have the net book cost in accordance with the Commission's Classification of Accounts if its books were completely re-set as you and Mr. Pace and other members of the accounting staff have reset them in
3001 these exhibits?

* * *

3002 The WITNESS. The purpose of this study was not particularly directed with any thought in mind of resetting the books, and I believe I would have arrived at the same results as I did here, regardless of any System of Accounts. If I hadn't had this System of Accounts at all, I would still have gotten this same answer.

But I believe what you have in mind by your question is that if all of our adjustments were recorded, then the books of the company would reflect this amount of money. That is
3003 the way I believe you meant it.

By Mr. MILDE:

Q. And this is not the net book cost as shown by the company's books, or anything like that?

A. No, sir; that figure does not appear on the company's books.

Q. And this is simply a figure you arrive at by applying your own adjustments and determinations of depreciation reserves, and so on?

A. Applying both ours and certain adjustments proposed by the company itself.

Q. That is right. Now in arriving at your adjusted depreciation reserve, Mr. Dunn, as you show it for total plant, of $23,500,000, you say on page 7 of your text that all plant costs from the inception of the company have been considered in the depreciation and depletion calculations. Do you find that statement on page 7 under your heading, "Costs Subject to Depreciation and Depletion"?

A. That is correct.

Q. Now what you really mean there, don't you, Mr. Dunn, is that it is the plant cost which the company capitalized in the past?

A. That is right; I did not attempt to compute depletion on items charged to expense.

3004 Q. Well, you didn't mean by "all plant costs," the amount of money actually paid by the company for the plant, did you?

A. The amount actually paid has been very carefully distinguished by Mr. Smith in his testimony, that you can pay for two types of costs, expense costs and plant costs. I charged the plant costs, the amount charged for plant, in this depletion study.

Q. We are perfectly clear, aren't we, that what we mean is that portion of whatever was paid to construct the property which the company capitalized, and no other portion of the moneys that were paid out to build the property?

A. That is right.

Q. And that is all you meant by this statement on page 7?

A. That is correct.

Q. Now isn't it a fact that this adjusted depreciation reserve we are talking about here, as shown in Schedule 1, can be used only in connection with your adjusted book cost, as you show it in line 5?

A. That is correct, it is directly related to that book cost, and has no relation to any other figure whatsoever.

Q. And this might be called an adjusted depreciation reserve applicable to adjusted book cost?

A. That is right.

3005 Q. Now this same schedule No. 1 shows, does it not, Mr. Dunn, that of the total plant of $51,200,000, or rather the adjusted book cost of total plant in that amount, you have treated, by depletion methods or depreciation calculations, about $10,000,000, as shown in column (c)?

A. That is correct.

Q. Now isn't it a fact that the supporting schedule for the figures you show in column (c) to which I just referred, is Schedule No. 2 on page 25?

A. That is correct.

Q. And here in column (b) under "Total," and in line 5, we again find this approximately $10,000,000 adjusted book cost of depletable property which you show in Schedule No. 1?

A. It is exactly the same figure.

Q. Now this shows, does it not, that you treat by depletion methods, "Operated Acreage," "Field Line Right-of-way and Construction Cost," "Gas Well Construction," and "Cost of Abandoning Gas Wells"?

A. That is the various subdivisions of this depletion calculation.

Q. Now you don't show anywhere in this exhibit, do you, Mr. Dunn, the details, or rather the methods by which you arrive at these figures on Schedule No. 2?

A. There is a little further break-down of Schedule No. 2 shown as Schedules 2-A, 2-B, 2-C, and 2-D.

3006 Q. Well, that is merely a break-down under your general classifications of the figures you show in total on Schedule No. 2?

A. Yes.

Q. But doesn't explain how you did it?

A. No; that does not show the detailed calculations; just a summary again.

Q. And the text of your exhibit merely says that you applied the depletion rates which we have just discussed?

A. Yes.

Q. And that information?

A. Yes.

Q. But you have supplied to us your working papers?

A. Yes; my working papers are voluminous and I have given you all the underlying calculations to check.

Q. Now in view of the absence of an explanation of just what you did here, Mr. Dunn, I want to go over some of these items so that we all have an understanding of how you proceeded, and how you arrived at your final result. Now I notice under column (e) in Schedule No. 2, Gas Well Construction, you show your first figure for the year 1923; isn't that right?

A. That is right.

Q. And no depletion figures for any year prior to that?

A. That is correct.

3007 Q. Just why is that?

A. That is because all gas well construction was charged to some other account than plant accounts prior to 1923. In other words, there is no depletion expense because the entire cost of the plant represented by gas well construction has been charged to expense direct.

Q. Well, what it means, does it not, is that you are dealing in your study only with the wells whose construction costs have been capitalized since 1923?

A. Dealing only with those wells.

Q. And how many wells is that?

A. I believe somewhere in the neighborhood—I believe in the plant account we show a total of slightly over 700 wells.

Q. 772 is the figure; do you recall that?

A. I believe that is it.

Q. So what you are working out in column (e) of the Gas Well Construction, is a depletion allowance for 772 wells out of the company's 3,300?

A. I believe I will have to correct that a little bit. We also considered all the wells in which cost was capitalized and then the well was retired, we considered those wells in this annual allowance, also.

Q. I see.

A. There are not very many of those, however.

3008 Q. We will get to that in a moment. But what you finally arrive at for your adjusted depletion reserve in column (e) as shown in line 41, of $1,100,000, is a depletion reserve computed only for 772 out of the company's 3,300 wells?

A. That is applicable to those 772 wells.

Q. And that is all it is applicable to?

A. That is all; yes.

Q. And your depletion allowance, as you show it; say, for 1937 and 1938, is for those wells only?

A. No; it is for any wells that the company might have had at that particular date.

Q. Plus any other wells that may have been in existence at 1937 and 1938 which the company happened to capitalize?

A. That is right.

Q. And which hadn't gone out of service in 1937 and 1938?

A. Yes, sir.

Q. Now you say on page 9 of your text that your method or basis of depletion in connection with gas well construction is annual production, do you not?

A. Yes; I do say so.

Q. Now did you actually use the annual production from these 772 wells, or other wells capitalized since 1923, in determining your figures?

3009 A. I might say that we didn't separate the annual production by individual wells, we separated it by these production areas, and also about 75 or 80 individual wells. So therefore, I must answer that by referring to one particular pool, and then I can give you a more direct answer.

Q. Well, I think you can tell me generally what I want to know now, Mr. Dunn. You have considered, haven't you, the production and the reserves for all of the company's wells in your figures; you haven't merely confined your depletion rates on the basis of the production and reserves of 772 wells?

A. Well, I would like to give you an illustration. Production Area No. 1-1 had no well construction costs capitalized whatsoever in it, and I did not include any production figures from Production Area 1-1 in my calculations for depletion.

Q. No; but suppose, Mr. Dunn, that you refer to Production Area 6-1—what did you do there?

A. I used the production from that particular pool from 1923 on; nothing prior to that.

Q. Well, I think I ought to have a direct statement, Mr. Dunn. You know what I mean when I say, "Did you use only the production from these 772 wells for which you have costs in your book account, or did you use production for all of the company's wells"?

A. Oh, I said I used the total production from that pool 3010 area, which would be every well in there that produced gas from 1923 on.

* * *

3052 Q. Now I want to go back for just a minute, Mr. Dunn, to page 9 of your exhibit, where you say that the basis of depreciation and depletion as appearing on your table at the bottom of page 9 for gas well construction is annual production.

A. Yes.

Q. Now, suppose you applied whatever you meant by the words "annual production" to a single well, how would you determine the depletion and depletion reserve?

A. I would take the original cost of the well when it was first placed in service and would determine the rate based on the remaining gas reserve, the total in this case, and the annual production, and applying that rate to the cost of the well would produce an amount of expense, and that expense accumulates to build up a reserve. Any retirements from this well are charged to the accumulated reserve, less whatever salvage is recovered.

* * * *

3053 Q. Getting back to our well, Mr. Dunn, do I understand if you had one well you would ascertain from somebody probably a geologist, the probable total recovery in m. c. f. from that well?

A. That is correct.

3054 Q. Then you would get from an operating man the amount of production, either metered or estimated by whatever you could do, and determine what percentage that was each year?

A. Yes.

Q. And that is the percentage of production and the remaining reserve after deducting plant depletion?

A. Yes.

Q. Then you apply that to your original cost to set up a reserve in dollars?

A. The way it actually operates is you use the remaining gas and remaining book cost. That automatically corrects any slight error that might occur in the estimate of the reserve.

Q. If one-half of the gas has gone from the well, as a physical matter, what is the ratio of your depletion reserve to the original book cost, or to the original cost?

A. On a unit basis, one well would probably be 50 percent.

Q. Fifty percent?

A. Yes.

Q. Would you say that accurately measured the amount of depletion in that particular well as of that particular day?

A. Yes; that would be a very good measure.

3055 Q. It would be an exact measure, would it not?

A. Well, to the extent that the estimate was correct it would be exact. The estimate may be incorrect. Of course, it is absolutely impossible to get it exactly.

Q. Of course, it would depend on if you had the right reserve.

A. We are dealing in this case with estimates.

Q. So we have found out. Now, if you had 772 wells and obtained the correct recoverable reserve for those 772 wells, or as nearly correct as geologists could estimate them, and then treated the 772 wells as a group and following the same method you apply to an individual well, what would be the ratio of your depletion reserve to the original cost of those 772 wells when half of the gas was gone?

A. Well, it might be 50 percent or it might be less. It could not very well be over 50 percent.

Q. If it were to be an accurate measure, it would have to be 50 percent, would it not?

A. Of course you are assuming there are no retirements and no well out of these has been abandoned.

Q. We are talking about the 772 wells which are now in existence.

A. And all came in the same day and went into production the same day?

Q. That would not make any difference, would it?

3056 A. Oh, yes.

Q. Well, Mr. Dunn, whether they came in on one day or the next day, if you are dealing with 772 wells, you could total up your figures across and get the same result.

A. Some of them are drilled deeper, which would increase the cost, while the reserve may be either more or less than the well originally had. There are many problems involved in that.

Q. As a practical matter, if you had a total reserve of these 772 wells and applied the method which you have used for one well, your reserve should be about 50 percent when half the gas is gone, should it not?

A. Provided that we make the assumption complete and you never drill any well deeper or do not change your gas reserve in any way or do not bring in more gas reserves, and they all went into production the same day and were retired the same day, then I suppose that would be 50 percent.

Q. I am coming to that in a moment, Mr. Dunn. Now, that is not what you did in this case, is it?

A. No; it is not.

Q. Now, as a matter of fact, you did not use in working out your figures, the remaining recoverable reserves for these 772 wells at all, did you?

3657 A. I believe I identified the reserves I used and the geologist's report, and did not relate it to any particular well as such.

Q. Did you know precisely what was included in the recoverable reserve figures which you got from the engineering department or the geological department when you made your figures?

A. I relied on their description, which said present drilled wells as of December 31, 1938. That is the figure that I was using. I believe I did use the amount shown under that heading.

Q. Is it not a fact that what you did was to take these reserve figures that somebody gave you and which spread out the company's gas reserves and production, and so forth, by 76 pool areas and use the figure finally for total ultimate recovery of m. c. f. as your starting point?

A. I think the starting point was the amount of recoverable gas from present drilled wells as of December 31, 1938. That was the starting point.

Q. Then what did you do?

A. I took the annual production figures, not just production from present drilled wells, but all wells, and computed the amount of reserves at the beginning of each prior year.

3658 Q. And you worked out in that method the remaining reserve all of the way back to 1923; is that it?

A. Yes, sir.

Q. And that was worked out by your application of a correction factor that was supplied to you, was it not?

A. The correction factor, of course, was to convert production.

Q. You are not vouching for the accuracy of these reserve estimates at the end of each year back to 1923, are you?

A. Obviously they are correct. They are only just as far wrong as the last preceding one is wrong.

Q. And if the correction factor, for example, were inaccurate or could not be applied to each pool area, your calculations would carry through those errors, would they not?

A. To that extent there would be an error in each calculation.

Q. That is right. You took me rather far afield from my notes, Mr. Dunn, and I want to get back to them again. Now, in these reserve figures we have just been talking about, it is a fact, is it

not, that you included in them nothing for deeper drilling of these present wells?

3059 A. That is the figure shown directly underneath the estimated production from present wells, is it not? Is that the figure to which you refer?

Q. I just want to know what you used.

A. As I stated before, I used only the reserve from the present drilled wells as of December 31, 1938.

Q. As they were then drilled?

A. Yes.

Q. If those wells were drilled deeper, you did not take account of any such additional production?

A. That would automatically follow. If you spend more money, you get more gas, and it goes into the rate automatically when that occurs. Of course, we do not take account of it before it happens.

Q. Is it not a fact, Mr. Dunn, your geologist estimated what the recoverable reserves would be from deeper drilling of present wells?

A. Yes.

Q. And you just discarded that figure, did you?

A. No.

Q. You did not use it, did you?

A. It does not apply yet. It applies when deeper drilling occurs.

Q. You did not use it at all?

A. No.

3060 Q. It is your theory if you drill a well down to 1,000 feet you just use the reserves that you get then for that well and all of the other wells in the vicinity and work out a depletion rate, and then you drill it down about 1,000 feet and you add your additional reserve at that time?

A. Obviously you add some cost for that expense, but you also get more gas and you add the gas and it therefore keeps in relationship. It is a very simple matter.

Q. That is not what you actually did for past years?

A. It was not necessary in past years. In fact, I did not have the figure broken down and it would be necessary to go back and separate all of those years out and go through all of them.

Q. You just did not do it in the past and you say that is the way to do it in the future?

A. As a practical method, rather than recompute the whole thing every year, you just add to it year by year. Why compute the whole schedule when it is unnecessary?

Q. Mr. Dunn, do you recall that Mr. Ross put in an additional gas reserve exhibit giving some figures for December 31, 1939?

A. Yes; I have seen his exhibit for 1939.

3061 Q. You are aware, are you not, that in that exhibit he made some changes in his previous estimate of recoverable reserves, drilled wells, pool areas, and what not?

A. I could not tell whether he made changes in his reserves or whether the figures were incorrectly computed, mistakes of addition. I did find many of them and he advised me there were many changes in addition. I could not tell whether it was a change in estimate or a change in addition, but they were very minor.

Q. That is your opinion?

A. I heard testimony by Mr. Ross that three or four percent of the total was a minor matter, and this could not be one-half of one percent; so it must be minor.

Q. Well, is it not a fact that on your method of calculating depletion on wells and on the other properties we are going to come to in a moment, you have just assumed that the reserve figures as of December 31, 1938, are accurate?

A. Yes, indeed.

Q. And to the extent that additional developments of the gas territory indicate, for example, in 1939, inaccuracies in those estimates, you have not taken them into account?

A. Well, I would take them in account when they develop.

3062 Q. You did not make any revised figures as of 1938 on account of Mr. Ross' changed figures in 1939, did you?

A. I do not know what the changes are yet.

Q. And you have not investigated that?

A. What?

Q. You did not investigate that?

A. Mr. Ross informed me there were some, and he has not given me the absolute amount as yet that I know of.

Q. Now, getting back finally to the first question I asked you when we started off, Mr. Dunn, is it not a fact that so far as working out the depletion allowance and reserve for these 772 well is concerned, you have actually considered the production and the recoverable reserves from all of the company's 3,300 wells, with the exception of such of the company's 3,300 wells as

are in pool areas where none of the well drilling costs happen to be capitalized?

A. And the further exception that no production goes back prior to 1923.

Q. That is right?

A. That is correct.

Q. Do you know how many of your pool areas have wells in them for which you have no construction costs
3063 whatsoever?

A. I would have to go through each one and see. I do not think there are many of them.

Q. You do not think there are many?

A. No.

Q. So, with these exceptions that we have made, is the general statement you have used the 3,300 wells, and that those exceptions are very minor?

A. Yes; in fact, it is all very minor.

Q. Now, turning to your schedule No. 1—first, referring back to your schedule No. 2 on page 25, your column "D" shows your computations for field line rights-of-way and construction costs, does it not?

A That is correct.

Q. Now, did you group these particular properties into pool areas the way you did your wells?

A. Yes; in a similar manner to the wells.

Q. You did that personally?

A. No; not personally. Several examiners of accounts did that, and they did it from the data furnished by the engineering division as to the location, by production areas, of the physical property.

Q. That is what I want to be sure about. Is it the engineering division, Mr. French or Mr. Brown or whoever it is—
3064 is it the engineering division grouped these properties, with you doing the mathematical work, or accounting?

A. It is the engineers who have designated the items of property by the various production areas.

Q. I see. Did they tell you to group these properties into pool areas, or did you tell them to give you the figures by pool areas?

A. I do not believe I know. It was probably decided in a conference in some way to arrange these 73 pools and this depletion, and I do not know who was primarily responsible for the first suggestion, if it might be called that. It certainly was not me because I was not here when these 73 areas were arranged.

Q. You are a recent arrival on these fields, are you not, Mr. Dunn?

A. October 21, 1940.

Q. So I judge from what you have said you are not taking responsibility for this general process of segregating the company's properties into areas, production areas; is that right?

A. I would not want to disclaim that or say I do not believe in it. I believe it is perfectly proper.

Q. Proper for what?

A. As a method of depletion and determining the amount of accrued reserve.

3065 Q. Is it an application of what you call the group method?

A. Yes.

A. I see. Would it not be an application of the group method just to group all of the company's properties into one series of depletion and depreciation calculations?

A. Yes; that would be a larger group.

Q. A larger group?

A. Yes.

Q. Do you think it necessary that the company's properties be split up into these particular pool areas in order to apply your group method?

A. It is not absolutely necessary. I would say that this is a refinement; because we wanted to know whether or not there would be any material difference, and I do not think now that there would be. But this is a refinement of a problem, for added accuracy.

Q. Well, this is something intermediate between the group method and the unit method; is that is?

A. I do not believe you could relate it in any way to the unit method. It is a refinement of the group method, I would say.

Q. Are you taking responsibility for this particular method of grouping these properties?

A. No; I do not know enough about the underlying

3066 geology to take full responsibility, but assuming the geologists are correct, I would take full responsibility for any computation of cost by reason of this grouping.

Q. All right. Now, what geological assumption has to be correct in order to have these pool areas segregated?

* * *

3070 Q. I think the question, Mr. Dunn, which we were discussing, is that your assumption was that it was not necessary that the production and reserves of pool areas and individual

wells, as you have classified them, be accurate, so long as the over-all production and reserves were accurate; is that right?

A. Maximum accuracy is desirable, but not absolutely necessary.

Q. And it is your testimony, is it, that if there are errors as to the production and reserves of any one or more of your individual pool areas, or individual wells, that that is immaterial?

A. Errors in estimates of gas applicable to the gas reserves?

3071 Q. That is right.

A. I believe it would be rather immaterial, it might play some part in the final answer.

Q. Now on what do you base that belief?

A. Largely because we have not taken out or eliminated any part of the total, it is all in there, and if the division is wrong, it means that one is too high and one is too low, there would tend to be an offsetting error.

Q. You don't know whether those errors will offset each other or not, do you, Mr. Dunn?

A. Not exactly.

Q. Do you know at all?

A. Yes, sir; that is exactly what, it would be, an offsetting error.

Q. Now, Mr. Dunn, offsetting errors, you know, do you not, as an accountant, could never balance each other if you are dealing with segregations of property into unequal units?

A. That is right. I testified that they might not exactly offset, but they would tend to offset.

Q. And isn't it a fact that the pool areas shown on Exhibit No. 41, and the property in these various pool areas as they appear in the original cost exhibit, 57, are very unequal?

A. Yes; they are very unequal.

Q. In some places you have got very little property,

3072 and in some places you have got a great deal of property?

A. Yes; that is right.

Q. Now as I recall it, you said that that was the only assumption, that is, the accuracy of an over-all estimate of production and gas reserves was the only assumption that you needed to consider as being accurate in order for you to say that you thought this division into pool areas, and so on, was proper; is that right?

A. I would prefer to let the geologists testify as to the division into pool areas. That is just my opinion, but the accuracy of these pool areas is up to the geologists, not up to me.

Q. But you have expressed an opinion, Mr. Dunn, and I want to know whether that is the only thing, the accuracy of that over-all estimate is the only thing that you think needs to be accurate, in order to support your view, as you have expressed it, that this division into pool areas is proper for the purposes for which you used it?

A. No; my view is that accuracy should extend down to the ultimate refinement if possible, but it may not be possible, and it may not happen that way. The most desirable and the most important accuracy is desired in the total. I would like to have it as accurate as possible, that is my position.

Q. Well, I am asking you if all that you think is necessary in order to support these pool areas, applied as you
3073 applied them, is an accurate over-all estimate of production and reserves?

A. No; I needed what I got, and that is a break-down of those reserves by production areas. I needed that in order to make my computations, and a reasonable break-down, particularly.

Q. Well, Mr. Dunn, when you assume that this pool area method, let us call it that, is proper—or rather, you have expressed your opinion that it is proper—do you not have to assume something as to the operation of the companay's properties?

A. Well, I think the operation of their properties up to 1938 is a fact, and it doesn't require any assumption.

Q. Well, that is just what I want to go into and inquire about, Mr. Dunn. Don't you have to assume that the properties which you have segregated into pool areas are operated in a particular way?

A. The method in which I have considered them as being operated is all reflected in the amount of gas withdrawn.

Q. Well, precisely what did you assume, then, either in expressing your opinion that this was proper, or in using these figures, as to the operations of the company by pool areas?

A. I didn't assume anything further than is shown in these depletion schedules.

3074 Q. And what is shown in your depletion schedules as to the operations of the company by pool areas?

A. The amount of gas withdrawn and the amount of gas remaining at December 31, 1938.

Q. That is the only thing that is shown in your exhibit?

A. Well, from the operating side. Of course, from the plant side there is the investment in the pool areas, which changes year by year—wells are added and wells are retired, or field lines are

added and field lines are retired, and it is continually changing.

Q. And the only thing you have assumed is that gas is produced from these 76 pool areas and 100-and-some individual wells, is that right, so far as an operating fact is concerned?

A. I don't think I have even assumed that; I think that that is what actually happened; that gas was withdrawn from these areas.

TRIAL EXAMINER. The use of that word "assumed" has certainly got me confused. I don't know whether it has the witness, or not.

Mr. MILDE. I will see if I can't clear that up.

By Mr. MILDE:

Q. On your own theories and computations, don't you have to assume that these properties which you have segregated into pool areas are used solely and exclusively to produce gas from that pool area?

3075 A. In the case of wells, I would say yes; but in the case of field lines, it could well happen that a field line in one or two instances might extend over into another production area.

Q. Well, isn't it a fact, Mr. Dunn, that you deplete field line construction by pool areas on the assumption that when the gas is gone, as other members of the Commission's staff gave it to you, that that line will be completely out of service; the lines in that pool area will be completely out of service?

A. On the theory or assumption that the construction costs will have no further value.

Q. That is right, and you make that assumption that when these gas reserves you have worked with by pool areas are gone, that the construction costs of the lines which you have assigned to that pool area, will have no further value?

A. Yes; that is right.

Q. And that assumes, does it not, that the lines in each of these pool areas will carry no gas other than that which you used in your computation for each particular pool area?

A. No; I wouldn't go that far, because in each case, if there is any doubt as to it—and this is what the engineers have told

3076 me—if there is any doubt as to the length of life as between various production areas through which a field line might operate, they have assigned that field line to the production area having the longest life that they can possibly determine.

Q. Mr. Dunn, that isn't responsive to my question at all. You are talking about lines outside of pool areas.

A. No.

Q. We haven't come to that yet. Now what I want to know is this: Isn't it a fact that you have assumed that when these gas reserves which somebody gave you, by pool areas, or which you converted into actual reserves by this 70 percent factor, is gone for each pool area, that the construction costs capitalized of field lines and rights-of-way of the lines in that pool area, will never serve any other purpose?

A. I think that that is generally true.

Q. That is a necessary assumption in your calculations, is it not?

A. Yes; that is right.

Q. Now are you taking responsibility for the accuracy of that assumption which is inherent in your calculations, or is somebody in the engineering staff doing that?

A. Well, I suppose the responsibility is on anybody making use of those figures; partly on me, partly on them. I would be
3077 glad to assume responsibility for the fact that when gas is gone, the field lines won't transport any more.

Q. That is all you know about it, however, isn't it?

A. That is all.

Q. You have made no investigation of the actual operations of the Hope Company, have you?

A. No; I have not gone out and looked at them.

Q. And if I went to any particular pool area on Exhibit No. 41, which you say you are not familiar with, and asked you how the lines of the company in that pool area were actually operated, you would [illegible] to tell me, would you?

A. No; I wouldn't be able to tell you that.

Q. Now, if it is a fact that some of the property which you list in any one of your pool areas, and deplete by your method, actually carries gas produced in one or more pool areas, your results are not accurate for that particular property, are they?

A. Yes; I think so, because that factor has been given consideration by the engineers, and I am informed——

Q. (Interposing.) Well, you think it has been given consideration by the engineers; isn't that what you are saying, Mr. Dunn?

* * *

3085 Q. Now isn't it also true, Mr. Dunn, that your method of calculation assumes that the existing lines which you
3086 have assigned to these pool areas would not help carry any gas from any additional wells drilled on operated acreage other than the wells drilled at December 31, 1938?

A. I think my method contemplates that there will be additional wells drilled.

Q. Well, did you——

A. (Interposing.) I fully expected that.

Q. Well, it is perfectly clear, is it not, Mr. Dunn, that in the total recoverable gas reserves that you used for a pool area, you did not include in that total any reserves from any additional wells that would be drilled on operated acreage after the end of 1938?

A. That is correct.

Q. Isn't it also true, Mr. Dunn, that your calculation assumes that these lines, which I described in the preceding question, will not help carry gas from any of these wells existing at December 31, when they are drilled deeper?

A. It certainly does not assume that.

Q. Well, Mr. Dunn, did you include in the total recoverable m. c. f. to which you applied your withdrawals, any gas at all for additional or deeper drilling of wells?

A. No; I explained this morning that when the wells are drilled deeper, those reserves, if any, will be added to the total recoverable gas at the time they are actually obtained.

3087 Q. We are not talking about wells, Mr. Dunn, we are talking about field lines.

A. I have used exactly the same rates on field lines, operated acreage, and leases, they are all in the same rates, and the recoverable reserves are determined by the wells themselves.

Q. And the fact is that the ratio of withdrawals by pool areas or depletion rates that you figured out for 1938, for example, assumes that that rate of withdrawal is a definite percentage of total recoverable reserves from the area, which do not include any reserves for additional drilling or deeper drilling; isn't that so?

A. That is so. There is very good reason for not including them.

Q. Well, the fact of the matter is that you also have not included, in your total recoverable reserves which you have used in your calculation, any of the gas which will be found in any of these pool areas by additional wells drilled on unoperated acreage; isn't that so?

A. Yes, sir; I have testified all the way through that the only gas reserves that I have used are the present existing wells as of December 31, 1938.

Q. And you also haven't included in your base figure, let us call it, your total recoverable reserves for pool areas, any gas that
3088 will be found in those areas in the future, or obtained in the future by additional wells that the company may purchase; isn't that also true?

A. Yes; that is absolutely true. I might add that it is highly desirable, in my theory and opinion, that such additional reserves not be added at this time.

Q. Well, the fact is that you have used a figure for total recoverable reserves from a pool area, and applied to that figure over the years the production, have you not?

A. I believe I explained that once before, that I used the recoverable reserves from the present existing wells as of December 31, 1938, and I have used the total production to date in connection with that reserve.

Q. And the figure for probable total recovery in m. c. f. by pool areas, which you used in your calculations, isn't the probable total recovery for that pool area at all, is it, as a matter of fact?

A. It is the probable total recovery of the present wells. As additional wells are purchased, if they are purchased, that additional reserve would be brought in, as it has been in the past, and the cost will be added in the year in which it was incurred, as it has been in the past; and depletion would be directly related then; the expense would be directly related to the cost in the year in which it was incurred.

Q. In other words, to apply your method, you have got to do something else than what you have done here, is that it,
3089 in the future?

A. No; I have just got to continue what I have done here.

Q. Well, Mr. Dunn, you have one of your pool areas in which you have fully depleted your line construction and rights-of-way, haven't you?

A. I believe there is one pool area where all the gas that was estimated has been withdrawn.

Q. And on your method there may be others, isn't that right?

A. Eventually there will be others.

Q. And that method assumes that the rights-of-way and lines in your one fully depleted pool area, which is Area 2-2, I believe, that assumes that they have no value, doesn't it?

A. That assumes merely this, that all the cost that has been capitalized has now been charged to operating expenses at the same time that all the gas was recovered from that pool area.

Q. Well, now, Mr. Dunn, that hasn't actually been charged to operating expenses, has it?

A. I am afraid that a great deal more than that has been charged to operating expenses.

Q. Well, now, what happens to Pool Area 2-2—where at least you have no value for that property—when an additional well is drilled in that pool area?

A. I am assuming that the additional well would find
3090 some gas?

Q. Oh, yes; surely.

A. Then the cost of that additional well would be written off over the gas that is obtained from it.

Q. And the fact of the matter is that if these present lines are used to help carry the gas from that additional well, you have overstated there the reserve they ought to have at the end of 1938, haven't you?

A. Possibly a little bit overstated it in the interests of conservative accounting.

Q. Now in that same pool area 2-2, Mr. Dunn, I think your work sheets show that although you had depreciated or depleted the rights-of-way and field lines down to zero, there was actually some additional production from the capitalized wells in that area during 1939; isn't that right?

A. If so, it would result in only a minor error in the total amount of gas recoverable; it might happen in any case.

Q. Well, the fact is that your 100-percent depletion reserve as of December 31, 1938, was not accurate; isn't that so?

A. I have never pretended that this depletion reserve is absolutely accurate, because it is based on an estimate, and to the extent that an estimate is slightly off in the final analysis, may throw the reserve off a little bit.

3091 Q. Well, isn't that just the point, Mr. Dunn, that you have used, for determining field lines and rights-of-way, probable total recoveries in m. c. f. for pool areas which do not take into consideration any additional gas that will be discovered, or anything of that sort, additional purchases, and so on?

A. Yes; my method contemplates writing off present existing property over present existing gas reserves, and if additional gas reserves are added, additional costs naturally are incurred, and they will be considered at their proper time, not before then.

Q. Well, Mr. Dunn, isn't that also another point in your assump-

tion—you have just assumed that the present existing property—and when I say "you" I mean nothing personal. I mean that your calculations assume—that the present existing property, as you set it up, will not help carry or produce any of the additional gas supplies which the company will develop in these various production areas?

A. No; that isn't necessarily true.

Q. You don't think that that is necessarily true in your figures?

A. Why, I am sure that it isn't, because it is obvious that a great many of these pools, not being fully depleted, we have added reserves which tend to extend or lower the rate, and they continue in operation.

3092 Q. Well, you have just assumed, though, in these figures, where you are trying to arrive at a depletion reserve as of December 31, 1938, that these rights-of-way and lines that we are talking about now, will not carry any gas other than the reserves remaining in the present drilled wells as of December 31, 1938; isn't that so?

A. No; that is not so.

Q. Well, what reserves did you use in your calculations, what recoverable reserves did you include in your calculations?

A. The recoverable reserves at the beginning of each and every year, from the beginning of operation of the company to and including 1938.

Q. And excluding in your calculations any reserves that will be added by additional drilling, deeper drilling, and additional purchases after 1938; isn't that so?

A. Excluding such reserves and any such costs incurred in connection therewith.

Mr. Springer. He has answered a similar question three times.

Trial Examiner. Yes; I agree with you. I think we have gone over that three or four times already, and it should be clear by this time.

By Mr. Milde:

Q. Was it your thought, Mr. Dunn, that when the existing field lines of the company were laid, they were installed
3093 with the idea of merely carrying the gas which the company had discovered up to December 31, 1938?

Mr. Springer. I object. That is really an operating question.

Trial Examiner. Well, I think as it is worded, it is. The objection is sustained.

By Mr. MILDE:

Q. Well, did you assume in making your calculations, Mr. Dunn, that that was the situation?

A. No; I assumed that they would carry gas as long as there was any gas for them to transport.

TRIAL EXAMINER. You didn't assume any conditions which might arise subsequent to that date, though, did you?

The WITNESS. Well, I let those conditions be applied in the year in which they occurred.

By Mr. MILDE:

Q. Well, you haven't given any consideration at all, have you, in your figures for December 31, 1938, to additional gas discoveries in 1939 and 1940?

Mr. SPRINGER. That is the fifth time, Mr. Examiner, the same question for the fifth time. I think half a dozen ought to be the limit.

TRIAL EXAMINER. Objection sustained.

By Mr. MILDE:

Q. Now, Mr. Dunn, suppose you were doing this job of 3094 yours as of December 31, 1940; would you then, in your figures for probable total recoveries in m. c. f. for these various pool areas, include the additional discoveries that the company made in 1939 and 1940?

A. Yes, sir.

Q. And isn't it a fact that as to any of your pool areas, where substantial additional discoveries or purchases were made, your probable total recovery in m. c. f. would necessarily be higher than as of December 31, 1938?

A. I don't believe it would change. The way I would compute 1941 is just add 1939 transactions onto it and 1940 transactions, and come to the answer at the end of 1940, just continue from 1938 on.

Q. I am just asking you, if you did this job as of December 31, 1940, just the way you did it as of December 31, 1938, then, in any of your pool areas where the company had discovered substantial additional reserves, or had purchased substantial additional reserves, you would have, as one of your figures, would you not, a larger probable total recovery for that pool area—we are clear that far, are we not?

A. I believe so.

Q. You would have a larger figure?

A. That is right.

TRIAL EXAMINER. You just assume that you would, don't you, you don't know whether you would or not?

3095 Mr. MILDE. I said if the company discovered the additional gas.

TRIAL EXAMINER. Well, that, it seems to me, is an engineering question, there might be other things that entered into it. However, if the witness thinks he can answer the question, he may go ahead.

Mr. MILDE. Well, I think he has answered it.

By Mr. MILDE:

Q. That figure would be larger than what you had for 1938 on these assumptions I have given you?

A. If you had more reserves, you would get a larger figure, that is sure.

Q. Now isn't it a fact that if you took that figure and worked this computation back over the years, just as you have actually done it for the period up to 1938, that your depletion reserve, as of December 31, 1938, would be different than what you show here?

A. If I used different figures, I would get a different answer, I suppose.

Q. And isn't it a fact, and necessarily true, that if you made this calculation as we have described it, as of December 31, 1940, your depletion reserve for this pool area, this hypothetical pool area we have been talking about, would be substantially lower for December 31, 1938, than the one you show by working your figures up only to 1938?

3096 A. That is not true.

Q. You say that is not true?

A. That is not true; they would not be substantially lower.

Q. Would it be lower at all?

A. There might be some very slight difference, I couldn't say, not having computed the figures you have in mind, but there would be no substantial difference whatsoever.

Q. And your testimony is that it would not be lower?

A. Substantially lower.

Q. What do you mean by "substantially"?

A. You used the word, I mean the same thing you meant.

Q. You say it would be lower, but you are not sure it would be substantially lower; is that your testimony?

A. Of course, I might rescind the entire answer and say that to get more gas reserves you might require considerably more expense, and it might change the entire set-up. I don't know how it would affect that. In each particular change in pools, there is a change three ways, there is a change in cost both by additions and retirements, a change in production, and a change in the ultimate recovery or the remaining reserves, and all of those would affect the answer.

Q. Well, on the case we were assuming, Mr. Dunn, what are all these additional costs, and so on; isn't it a fact that we
3097 have assumed you have got the same pool area and the same wells that you had in 1938 except that you have now gotten some additional gas reserves in 1939 and 1940? We don't change any of the figures back of 1938 in our assumption.

A. My understanding of this method is that in order to get additional reserves, you must drill more wells or acquire more acreage. That would represent a change in cost.

Q. Well, did you understand my question, Mr. Dunn, that I was asking you whether, if you redetermined these figures for this pool area that we have been talking about, whether your reserve as of December 31, 1938, would not be different than if you had computed it on your method only up to December 31, 1938?

Mr. SPRINGER. I object again to the question and answer. It is the same question over and over again, and he has already answered that question.

TRIAL EXAMINER. Read the question, please.

(The question was read by the reporter.)

Mr. SPRINGER. He has already answered that, Mr. Examiner.

TRIAL EXAMINER. I am not sure that I understand the question, so I don't know whether he has answered it before or not. The objection is overruled.

The WITNESS. Due to the fact that all the underlying conditions might change, I do not know what the result would be.

By Mr. MILDE:

3098 Q. Now, Mr. Dunn, in the case of your depletion computation for gas well construction, you charged against your hypothetical depreciation reserve, as you were calculating it, the wells that had been retired, did you not, in the year in which they were retired?

A. That is correct.

Q. And you did that by individual pool areas?

A. Yes.

Q. That is, you analyzed what had happened actually as shown by the books for these various areas which you have labeled "pool areas"?

A. Production areas.

Q. Now you didn't do this in the case of retirements of field lines, did you?

A. I did not. My answer might be misunderstood. I did charge all the loss on retirements of field lines to the accumulated reserve, but I did not assign them to pool areas.

Q. Now will you point to the page in your Exhibit 61 where you worked that out?

A. What page?

Q. I am asking you what page it is.

A. Where I worked it out or where I set it out?

Q. Set it out, referring to lines—isn't that on page 29?

A. That is correct.

3099 Q. And isn't it shown under your heading "Property Retired"?

A. That is correct.

Q. Now is that a correct statement of what you did, Mr. Dunn, you took field line and right-of-way retirements which had occurred in the past all over the company's system, and found that they were $695,000 as shown in your last figure on column (ff)?

A. That is correct.

Q. Now actually, those retirements occurred in various ones of your production areas, did they not?

A. At least the large part of them must have.

Q. Well, didn't all of them?

A. There might be lines to individual wells outside of production areas, there are many purposes of field lines.

Q. Now isn't it a fact that if you had charged these retirements against your depletion reserves for your individual pool areas, that you would have had a lower adjusted depletion reserve as of December 31, 1938, than you have now?

A. I believe the tendency would, in that case, have been to lower the reserve, and also lower the expense in those particular years, lower the expense and likewise lower the reserve somewhat. Of course, it is utterly impractical to do such a thing, there are about 12,000 of these lines.

Q. And because it was impractical, you say you didn't

3100 do it?

A. That is right.

Q. Although it would have resulted in a lower depletion reserve than what you show?

A. Possibly a slightly lower one.

Q. Well, now, what caused that impracticality, Mr. Dunn?

A. The great number of field lines involved.

* * *

3101 Q. As I understand the situation, if you had charged retirements in the past against the pool areas in the case of field line construction and rights-of-way, as you did wells, you would have arrived at a somewhat lower depletion reserve as of December 31, 1938?

3102 A. I would have arrived at a somewhat lower annual expense and a somewhat lower depletion reserve, somewhat.

Q. You mean an annual expense all the way back to 1898?

A. Including the years under consideration now and all prior years.

* * *

TRIAL EXAMINER. Did you testify that you would have gotten a more correct answer had you broken it down into pool areas?

The WITNESS. I believe a little bit more correct answer.

TRIAL EXAMINER. And the reason you didn't do that is because it wasn't practical?

The WITNESS. Yes; I gave very careful consideration to

3103 the problem of breaking it down by pool areas, and in view of the actual conditions it would have required a great amount of time. This is a very small amount of money involved in relation to the total here, and the amount of time involved would have been entirely disproportionate to any answer that would be possibly changed. It is an utterly minor point.

* * *

Q. Referring to page 28 of your exhibit, I notice that you lump your depletion figures prior to 1913 all in one group, isn't that so?

A. That is correct; we did that.

Q. And isn't it a fact that what you did was to take the capitalized costs that existed in 1913 for Rights-of-Way and Field Line Construction, and applied to that the ratio of withdrawals from 1898 up to 1913 in one lump figure as applied to the reserves for that period?

A. Yes; we treated the period 1913 back to 1898 just as if it were one year, instead of many years.

Q. Now, that method of treatment necessarily assumes, does it not, that the property in existence in 1913 had helped carry gas from various production areas right from 1898 on,
3104 or whenever the first production began in each area?

A. Well, I wouldn't say that, because this is strictly on a unit of production, and has little reference to years, back in those early days especially.

Q. Well, suppose a line was installed, a field line, in 1912; you apply something like a 90 percent depletion factor to that line, don't you, in your 1913 figures?

A. If it happened to be in a production area of which there was one that in 1913, 90 percent of the gas had been withdrawn, 90 percent of the cost was written off in 1913.

Q. So that line which I have been talking about, installed in 1912, you would write down on the assumption, would you not, that it had helped carry gas right from the beginning of the gas producing operations of the particular area?

A. It was on a unit-of-production method, and it so happens that it covered a period of 13 years, and possibly you could draw such an inference. I don't know that I had to assume that. I mean, if that much gas had been drawn in one year, I would have gotten exactly the same answer as if it had been drawn in 13 years.

Q. Well, Mr. Dunn, it isn't very accurate, really, is it, to lump all the years from 1898 to 1913?

A. I wouldn't have done it if I could have avoided it, but that is one of the characteristics of this company, that no gas
3105 was metered or calculated, prior to 1913, as far as I know.

Q. That is as far as you know?

A. Yes.

Q. You made no investigation to ascertain, I assume, whether or not the right-of-way and field line costs which you started with in 1913 had actually been installed right from the beginning of the gas-producing activities, did you?

A. Oh, we actually had the figures before us by years from the inception of the company, so I knew exactly when all costs were incurred.

Q. So that you do know that a substantial portion of the right-of-way and field line investment was not made in 1898 when production activities first occurred, but was scattered throughout the years right up to 1913, don't you?

A. They were scattered, that is correct.

Q. Let me ask you, Mr. Dunn, if, in your computation also, you didn't use the costs as you set them up for January 1 of each year, to apply a depletion rate?

A. That is merely a mathematical computation. On depreciation we use average costs. Here it would be absolutely incorrect to use that, because we take the remaining costs over the remaining reserves, and we take the costs at December 31, less the amount accumulated, before any provision is made during the current year, and apply it. That is mathematically correct—any other method would be wrong.

3106 Q. Well, isn't it a fact that you assume, in that method, that property installed at any time during the year has helped carry gas from the first of the year?

A. Time doesn't play much of a part in this, as such; it is the amount of production that is really important.

Q. I am asking you whether that isn't an assumption inherent in your method?

A. If I was getting cost by months, for instance, I would take the amount that I computed at the end of the year, and divide it by 12, and I would get the amount of depletion expense each month.

Q. Can't you answer my question, Mr. Dunn?

TRIAL EXAMINER. Just what did you do here?

The WITNESS. Oh, I took the balance of the investment account at the end of the year, less the accumulated reserve as at the end of the year, but before current provisions were made, and that is the amount I applied the rate to.

By Mr. MILDE:

Q. And that includes, does it not, moneys that the company has spent in the summer and fall when it was building lines?

A. That includes both additions and retirements during the year.

Q. Now I notice that on your table here on page 28, in line
3116 34, you have an item of "Reserves Acquired" in the amount of $126,000.

A. Yes, sir.

Q. Now as I understand it, what you have done on these accounts is to compute what I would call a hypothetical depletion reserve of $2,992,000, and then you add to that the reserves acquired; is that right?

A. The $2,992,000 is the sum of the annual provisions to expense, that is what would be charged to expenses, and there is an

amount of $136,000 which is reserves acquired, as you have stated, added to that.

Q. Well, now, that increased your depletion reserve by $136,000 over your other calculations; isn't that so?

A. That is correct.

Q. Now that is the reserves that the Hope Company acquired or put on its books, is it not, in connection with the rights-of-way and field lines purchased by it from other companies?

A. Yes; the one company, the Clarksburg Light & Heat.

Q. And by adding it to your reserves, you have assumed, have you not, that the reserves that the Clarksburg Light & Heat Company had set up, and which Hope in turn set up on its books, correctly measured the depletion in those acquired lines as of the date of the purchase?

A. Yes; I think that that is a very correct figure as to the depletion existing in those lines as at that date.

3108 Q. Well, did you make any investigation of that, Mr. Dunn?

A. You mean recomputing the reserves set up by Clarksburg Light & Heat?

Q. I am asking whether you made any investigation as to whether that inherited depletion reserve correctly measured the depletion on your theory, of the properties acquired by the Hope Company from Clarksburg Light & Heat.

A. There was no investigation required on my part; I knew it did.

Q. Your theory is whatever the Clarksburg Light & Heat Company set up on its books for a reserve in connection with field lines and was transferred to the Hope's reserves, correctly measured the depletion of the properties purchased by Hope, is that right?

A. Yes; this is entirely a cost transaction as of 1929.

Q. What you do in effect there, Mr. Dunn, is to put into your accounts here, merely the purchase price which Hope paid for those properties?

A. Yes, sir; Hope's plant cost and reserves are stated on a cost basis.

Q. So that for field lines and rights of way purchased by Hope from Clarksburg Light & Heat Company and in

3109 existence at December 31, 1938, you have the purchase price less any depletion figures in respect to that purchase price

which might be included in your figures from 1929 on; is that not so?

* * *

A. I do not have anything less than the purchase price; I have the original cost less reserves, which equals the purchase price.

Q. You have depleted that property since then in your figures from the time when the Hope Company took over these properties, have you not?

A. That is right. All of those figures equal the purchase price in 1929, and subsequent to that I have depleted them the same as any other property of Hope.

Q. So what you have finally is the depleted purchase price in your final figure?

A. That is correct.

Q. I notice on this table which we have been referring to, subschedule No. 2-b, on page 29, that you deal with what you call individual wells and marketing lines and purchasing lines in columns CC, DD, and EE. What is the fact as to your treatment of individual wells?

A. That means lines to individual wells and there is not 3110 a terrific amount of cost involved here, and rather than deplete each one of them separately on the basis of the estimated gas reserves for each individual well, I have grouped them and depleted them on the basis of the total gas reserves of these individual wells and the total production of these individual wells.

Q. How many individual wells are there?

A. There are quite a few. I believe there are 75 or 80, and maybe there are more than that.

Q. There are well over 100 of them, are there not?

A. That is probably true. It may be there are as many as 175.

Q. And you added up the reserves and production figures for all of those individual wells and considered them as a whole?

A. Yes.

Q. And they are scattered all over West Virginia, are they not?

A. I Believe they are.

Q. And you could have done that same thing for all of the 772 wells, could you not?

A. No; I did not have the individual reserves computed for each well, unless they were just labeled individual wells.

Q. But if someone furnished you that information you
3111 could have handled all of the 772 in that same way, could you not?

A. I could have; yes.

Q. What is your treatment of marketing lines, and just what are they?

A. That is a figure that was furnished me by the engineering division, and I believe they could answer what they are better than I could.

Q. Do you know what that phrase means?

A. They tell me they are lines used to market gas locally; little sales lines right out in the field.

Q. But apart from what they may have said about it, you do not know what they are or where they are?

A. No.

Q. Or what use they are put to?

A. No. I just have their word for it.

Q. How did you handle that particular classification, Mr. Dunn?

A. That small amount of cost is written off over all gas produced and all reserves from present exi-ting wells as of December 31, 1938.

Q. And that method assumes, does it not, Mr. Dunn, that the company will not develop any additional reserves by additional drilling or purchases after December 31, 1938, in order to put gas through these marketing lines?

A. No; I do not believe it assumes that.

3112 Q. Well, in your calculation, you base it on the probable total recovery of gas for the company's whole system, merely up to its gas development activities as they were made prior to December 31, 1938, have you not?

A. Yes, sir. I might say I would have the choice of either using the December 31, 1938, figure or the total recoverable gas, we will say, from deeper drilling, and on an operated acreage, and all of the other figures, but in the interest of conservative accounting, inasmuch as this gas may never be recovered or it may be deemed not worth while to get it, I wrote it off over the costs known to be incurred and the reserves known to be subject to recovery. It would be stretching your imagination a little bit to include all of the other costs.

Q. Your theory is that just as a matter of conservative accounting the company ought to write off its property rapidly, I take it?

A. If there is any choice between conservative and nonconservative figures, I would certainly pick the conservative figure.

Q. Actually, Mr. Dunn, this depletion reserve for marketing nes and so on, does not purport to measure the exhaustion of the ervice life of those marketing lines, does it?

A. I think it measures it very closely. The chances
3113 are, I am informed by the engineers and geologists, that when all of the gas has gone out of West Virginia, or even ut of the present existing wells, there will be little, if any, use or these local marketing lines. The amount is insignificant. I lo not know what would happen if we used some other method.

Q. And if the engineers are wrong about that, of course you are wrong?

A. Yes; I would change it if I had any better information.

Q. And what you have just said now is all of the gas in West Virginia—you did not use the ratio of Hope's production to all of the gas in West Virginia or even all of the gas that Hope will recover in West Virginia, in working your depletion of these lines, did you?

A. I understand that a ratio does not necessarily have to be higher or lower by using all of the gas in West Virginia. This is a ratio and is not necessarily higher or lower by reason of some change.

Q. Mr. Dunn, you can answer my question. Will you read it, Mr. Reporter?

(Question read.)

A. No; I did not use all of the gas in West Virginia.

Q. Now, your next item is purchasing lines; what are they?

3114 A. They were set up by the bureau of engineering; I did not select them at all.

Q. You do not know what they are?

A. I have been told what they are; do you want me to state that?

Q. Yes.

A. These are little local lines running out to the various purchase gas contract lines.

Q. That is what you understood when you put that phrase down?

A. That is what I was informed.

Q. How did you handle purchasing lines?

A. In exactly the same manner as marketing lines.

Q. You assumed then, did you not, Mr. Dunn, in handling them in that way, that the gas reserves of the company's 340 contract vendors, collectively or individually, were being depleted

in the same ratio that Hope's 1938 gas reserves were being depleted?

A. I was informed by the engineers that that was substantially true.

Q. And who informed you of that, Mr. Dunn?

A. I believe several of the engineering staff informed me.

Q. Will you state their names, please?

A. I am sure I consulted with Mr. French on it.

3115 Q. Mr. French told you that the gas reserves of the company's contract vendors, their over-all gas reserves, were being depleted in the ratio of Hope's production to Hope's 1938 reserves?

A. Not in exact ratio, but there is a relationship there.

Q. But you have used this relationship on Mr. French's statement to you?

A. Yes.

Q. You assumed it was the same?

A. I would assume it would make no material difference because there is only a very little amount of money involved.

Q. You think every time there is a little amount of money involved it does not make much difference whether your figures are accurate or inaccurate?

A. There is always the problem to consider whether an enormous amount of work is justified by the results obtained from it.

Q. That means you used a good many short-cuts here to get your final figures, I assume?

A. It looks like about three short-cuts in this case involving not over $400,000 over a period of many years.

Q. You mean $400,000 in depletion reserves?

3116 A. In plant cost.

Q. Which you deduct in your depletion reserve?

A. Gross.

Q. Now, Mr. Dunn, refer back to your schedule No. 2 on page 25 with which you started.

TRIAL EXAMINER. Off the record.

(Discussion off the record.)

By Mr. MILDE:

Q. You show in your column headed "C," operated acreage.

A. What page?

Q. 25.

A. Yes.

Q. Did you use the same methods we have discussed in connection with field lines and rights-of-way in working out your figures for operated acreage?

A. Yes; the same rates were used.

Q. The same methods?

A. Yes.

Q. You have an adjusted book cost of about $1,600,000 in line 5, and that is the consideration paid for the leases; is it not?

A. Yes; that is the original cost as of December 31, 1938.

Q. That is the dollar or two an acre which was paid
3117 to land owners?

A. In some cases it is considerably more than that.

Q. Is it not also true in working out your figures on operated acreage you also used your pool area method?

A. That is true.

Q. In connection with retirements of leases, you did not charge them by pool areas; did you?

A. No; that is true; I did not.

Q. You handled those just like the retirements we talked about in connection with field lines and rights-of-way?

A. That is true.

Q. And your same general statements as to the reasons and the effect of that method as applied to field lines and rights-of-way costs would apply here; would they not?

A. That is true.

Q. In addition to your adjusted depletion reserves, you develop in this exhibit the depletion allowances for 1937 and 1938, which appear in the income accounts as presented in other exhibits?

A. Yes; they are directly related.

Q. And the amounts of money you have set out in schedule No. 1 on page 23, for example, for 1937 and 1938, are the result of the application of these rates to the cost in each of those years; is that not so?

3118 A. Yes.

Q. And those are the same rates which you used to develop the depletion reserve?

A. Yes, sir.

Q. And all of the assumptions we have talked about in connection with your determination of depletion reserves and other matters apply to your determination of depletion rates; they are one and the same thing, being correlative?

A. That is true. If we lower the reserve, we lower the annual expense, and if we raise the reserve we automatically raise the annual expense.

Q. And these annual depletion rates are all based on this information which was supplied to you in connection with determining depletion reserves, the information supplied you by engineers, and so on; it is the same subject, is it not?

A. Yes.

* * *

3123 Cross-examination by Mr. REEDER:

Q. Mr. Dunn, I believe you testified that in your opinion if you had used the method suggested by Mr. Milde, it would have been generally unfavorable to the company for rate-making purposes: is that right?

* * *

The WITNESS. I do not believe I could state it in the exact dollars and cents, but I do believe that it would have created a higher reserve which would tend to be unfavorable in rate-making
3124 proceedings, leaving less net book cost.

By Mr. REEDER:

Q. It would have resulted in a higher or lower annual allowance for depletion?

A. I believe it would have resulted in a lower annual allowance for depletion.

Mr. REEDER. That is all.

* * *

3621 Cross-examination (continued) by Mr. MILDE:

Q. Mr. Dunn, isn't it a fact that on December 31, 1938, the Company had, according to your figures, 3,262 active gas wells in service?

A. I believe that is the figure. Do you want me to check it exactly?

Q. Yes; if you will.

A. Yes; I have the figure of 3,261, I believe. I got that by adding up the number of wells in which well equipment was capitalized.

Q. 3,261?

A. Yes, sir.

Q. Isn't it a fact that of these wells, there were some drilled each year back from 1938 all the way to 1891?

A. That is correct.

Q. And of the wells drilled prior to 1903, that are now in service, those were wells purchased by the Hope Company after they had been drilled by other parties; isn't that so?

A. Well, I would have to check on that particular point, I don't recall.

Q. Well, you know that the Hope Company first began to drill wells itself in 1903, don't you?

3622 A. No; I never have made any particular study of that, of when.

Q. You didn't determine that that was so in connection with your analysis of original cost data?

A. Oh, yes; it is in the work papers, the date every well was drilled is in there.

Q. And you just don't recollect that now?

A. That is right.

Q. Do you know when the Hope Company first began to abandon wells?

A. That was also included in the work papers.

Q. Can you determine it readily from your working papers?

A. I think so; yes.

Q. Suppose you tell us?

A. Oh, not that readily. It would require maybe several hours.

Q. Well, isn't it a fact, Mr. Dunn, that right from the beginning of the Company's operations to the end of 1922, the Company charged the cost of abandoning wells to operating expenses as the wells were abandoned?

A. Yes; I think that is absolutely a fact.

Q. They were charged to an account called Field Lines and Wells, Account 17, Operating Wells and Field Lines; isn't that so?

A. I would have to check on the exact account; I don't

3623 recall.

Q. Now, isn't it a further fact that under the 1921 West Virginia Public Service Commission Uniform Classification of Accounts, that became applicable to the Company in 1923, the cost of abandoning wells was required to be charged to operating expenses?

A. I believe they have an account in there.

Q. And that in accordance with this Classification, the Company continued to charge well abandoning costs to operating expenses as wells were abandoned?

A. Yes, sir.

Q. And that is true as a direct charge to operating expenses up through 1931; is it not?

A. That is right.

Q. And then in 1932, the Company made a charge in effect to operating expenses directly, did it not, by setting up a reserve each year for the anticipated abandoning costs, and then when the actual costs were known, charging that to the reserve and wiping out this year by year accrual?

A. That is right, the reserve is in effect a charge to operating expenses.

Q. So that, right from the beginning up until 1938, the Company has charged the cost of abandoning wells, as they were abondoned, to operating expenses?

A. Yes, sir.

3624 Q. And that was recognized as good accounting practice in the industry, was it not?

A. Certainly. It might still be recognized as good accounting practice; in other words, if there is no provision in the reserve for cost of removal, cost of removal is an expense.

Q. Now will you turn to your Schedule No. 2 on page 25 of Exhibit No. 61? You recall, do you not, Mr. Dunn, that at the last session we discussed columns (c), (d), and (e) on Schedule No. 2, which were the columns that showed the results of your depletion provisions for Operated Acreage, Field Line Right-of-Way and Construction Cost, and Gas Well Construction?

A. I do.

Q. And we had not reached Column (f), which is entitled "Cost of Abandoning Gas Wells." And there you show, do you not, at the bottom of your column, in line 33, total annual accruals to December 31, 1938, of $2,100,000?

A. That is correct.

Q. Now isn't it a fact, Mr. Dunn, that the details for this determination are shown on your Schedule No. 2D, at pages 32 and 33?

A. That subschedule shows the details of cost of abandoning gas wells by production areas.

Q. And the column (b), as it appears on page 32, is the one that you subsequently transferred to column (f) on

3625 Schedule No. 2 at page 25, isn't that so?

A. Yes, sir; that is correct.

Q. Now referring to page 32, your first line is, or your first group of lines appear under the heading "Cost Subject to Depletion," do they not?

A. Yes, sir.

Q. And here they are shown as blank?

A. That is correct.

Q. And the fact is that you aren't depleting any costs at all in this instance, are you?

A. We are not depleting any invested cost.

Q. You are not depleting any costs, are you?

A. This is strictly a provision for cost of abandoning in the future, and is not incurred today.

Q. That is right, this isn't really a depletion allowance at all, is it?

A. In the terms of depletion being applied to invested capital; no, it is not.

Q. Or applied to any amount of money; you have nothing to deplete here, have you?

A. No; as I explained, it is exactly what it is labeled, the cost of abandoning gas wells in the future.

Q. There is an accrual, or a hypothetical accrual, of a fund to take care of future operating costs or abandoning costs; isn't that so?

3626 A. Well, I believe I just said it was an accrual to take care of the future cost of abandoning gas well, determined as explained under column (a).

Q. Now as you worked that out, Mr. Dunn, you find under line 5 that the expense for the cost of abandoning gas wells, computed for each active gas well at December 31, 1938, at $1,007 per well, will be $3,285,131; isn't that so, as shown in column B?

A. Yes.

Q. And that is your estimate, or the estimate of yourself and Mr. French, of what it will cost the Company to abandon the 3,261 active gas wells that were in existence at December 31, 1938, and which you classified as then in service?

A. That is right.

Q. Now the fact is, is it not, Mr. Dunn, that in the past the Company has not set aside any funds for these future abandonment costs of these existing wells, but has, on the contrary, followed the practice of charging well-abandonment costs to operating expenses as wells were abandoned?

A. That is correct. The first part of your sentence—I might add, there are no funds earmarked for this specific purpose. I won't go so far as to say that they have not set aside funds for this purpose.

Q. You didn't find any set aside on the books, did you, by way of any reserve?

3627 A. No; I didn't find any specific reserve for this particular point; no.

Q. Now this set-up of your's, Mr. Dunn, reflects a shift, does it not, in accounting policy or procedure or requirement?

A. Well, it represents a change, I suppose, in the method of handling cost of abandoning gas wells, certainly.

Q. Heretofore, the cost of abandoning wells has been charged to operating expenses as wells were abandoned?

A. Yes.

Q. And you recognize, do you not, that if that practice is followed consistently, that that produces a fair and equitable result?

A. Yes; it produces a fair result. It may produce a very distorted picture of operating expenses in the future, however; if you start having an abandonment cost of over $3,000,000 that should be charged into operating expenses, it might produce a pretty heavy charge against operating expenses in the future. It should be provided for now.

Q. It hasn't had that effect in the last 40 years, has it, Mr. Dunn?

A. No; there have not been great numbers of gas wells abandoned during the past 40 years.

Q. Why, Mr. Dunn, you know, do you not, that there have been over 2,000, or close to 3,000 gas wells abandoned by the Compahy?

3628 A. Well, over a period of 40 years; yes.

Q. And what you say about some distorted result is just on the assumption that the history in the future will not be the same as the history of the Company in the past?

A. Well, it is based on the fact that these wells will probably be abandoned more frequently in the future than they have been in the past. That is one assumption.

Q. Well, a well is abandoned only once, isn't it, Mr. Dunn?

A. Certainly.

Q. And the fact is, you don't know what the result will be in the future unless you can predict the history of the Company's production system and predict that it will be different in the future than it has been in the past?

A. Well, I think certain future predictions have been made of the Company's future production, and they are in the record, and the geologists estimate the future gas reserves.

Q. Well, all I want to get perfectly clear, Mr. Dunn, is that here the Company, right up until 1938, has been following one system of taking care of this cost, which is to charge well abandoning costs to operating expenses as the wells are actually abandoned. That is true, is it not?

A. Yes; although they probably, at 1932, foresaw the need of some kind of a reserve accounting.

Q. And what you have done here is to set up an accrual
3629 on a different theory, isn't that so?

A. Yes; absolutely.

Q. A completely different theory. Your theory is here that the Company should have accrued a reserve in the past to take care of the abandoning costs of the present existing wells?

A. That is correct.

Q. And it is a sort of a hypothetical accrual, is it not, Mr. Dunn, which you have developed by taking the production of all of the Company's wells in the past, plus the reserves of the existing wells, and you have determined on the ratio of this production to these total reserves, that the Company should have set up a total of $2,107,000, isn't that approximately what you did?

A. Well, when you say "sort of hypothetical," I think this is a very real cost. As I understand the law in West Virginia, you are required to spend about $107,000 as an average cost per well in the future when you abandon that well. I think it is a very real cost and expense.

Mr. Slaff. Did you mean $1,007 in your last answer? You said $107,000.

The Witness. Yes; $1,007.

By Mr. Milde:

Q. Of course this is a very real cost, and we both agree that in the future the Company will have to spend about
3630 $3,285,000 of cash to abandon its present existing wells?

A. I fully expect that they will; yes.

Q. And there isn't any doubt about it that that is coming right out of the Company's pockets, isn't that so?

A. Any estimate in the future might be in some slight doubt, but this seemed to be about as real a figure as we could develop.

Q. It represents real dollars the Company has to spend?

A. I think so.

Q. That isn't what I asked you before, Mr. Dunn. I asked you whether it wasn't a fact that you have got a hypothetical accrual, which assumes that in the past the Company has set aside $2,107,000 towards this future cost?

Mr. SLAFF. That was answered, Mr. Examiner. I object to the question, because it has been answered just previously.

TRIAL EXAMINER. Well, he stated that he didn't consider it a hypothetical matter.

Mr. SLAFF. That is right, he answered it completely.

Mr. MILDE. Well, you don't understand it. May I have the question read again?

(The question was read by the reporter.)

TRIAL EXAMINER. Go ahead and answer the question.

The WITNESS. I don't understand the difference between accrual and hypothetical accrual, but I will answer in terms of ac-
3631 crual in the past, which I will say, as I already said once, that the Company did not provide a specific reserve in the past earmarked for this particular purpose. However, the Company in the past has provided a great deal of reserve which is available for any purpose, and not earmarked for any particular item.

By Mr. MILDE:

Q. This isn't any sort of a depreciation allowance, is it, Mr. Dunn; this is something different; this is merely an accrual for future operating expenses?

A. It operates exactly the same as a depreciation allowance.

Q. And you haven't found anywhere that the Company at any time set aside any funds for the cost of abandoning property in the future?

A. They have a great deal of reserve available for that purpose.

Q. That isn't what I asked you.

Mr. SLAFF. The question has been asked three times and answered three times by the witness.

TRIAL EXAMINER. Yes; I think he has already stated that a couple of times.

By Mr. MILDE:

Q. What have you already stated?

Mr. SLAFF. I object to that. If counsel wants to know what has been stated, he can have the reporter read back the
3632 record to him, and I am willing to have him do that.

TRIAL EXAMINER. He stated that he didn't find any funds earmarked for that purpose.

Mr. MILDE. That is what I understood, and I thought he was trying to modify that answer, and I want it perfectly clear that there was no modification of that.

By Mr. MILDE:

Q. Now, actually, Mr. Dunn, it would have been completely impossible for the Company to have set aside an accrual for these future abandoning costs in the amounts that you have shown here, would it not?

A. By no means would it have been impossible.

Q. Well, in the first place, Mr. Dunn, the Company would have had to know, back in 1898 or thereabouts, that in 1938, or the end of 1938, there was going to be a different accounting system which shifted the theory of handling well abandonment costs, wouldn't it?

A. Well, this isn't particularly a different accounting theory, this is done quite often. I understand that the Company was very familiar with depreciation accounting and depletion accounting back in 1898. There are many letters on file to show that they understood it practically as well then as they do today.

Mr. MILDE. Will you please read the last question, Mr. Reporter?

3633 (The question was read by the reporter.)

By Mr. MILDE:

Q. Now, can you answer that question?

Mr. SLAFF. Let's have the answer read, too.

TRIAL EXAMINER. Read the answer.

(The answer was read by the reporter.)

Mr. SLAFF. It is perfectly answered. He said there is nothing different about it.

TRIAL EXAMINER. You mean that a new system has not been instituted as suggested by the question?

Mr. SLAFF. That is my understanding of the answer, yes; no new principle. What he is saying is that the assumption that counsel is making in his question just doesn't exist as a matter of fact, that is all.

TRIAL EXAMINER. Is that what you mean to say?

The WITNESS. Well, yes; if I understand his question, he assumed that by some action of possibly a regulatory body or some new theory of accounting, that a condition exists today that didn't exist then in accounting, and I say not.

By Mr. MILDE:

Q. Well, Mr. Dunn, the question I started with is this, and I think you agreed with me—if not, you can so state: that as a matter of practice, the Company couldn't possibly have set aside in the past this hypothetical accrual of yours in the total amount of $2,100,000; isn't that so?

3634 A. It couldn't possibly have set it aside?

Q. In the amount that you there show.

Mr. SPRINGER. I object to that. The Company has shown a depreciation accrual that is excessive here, of $40,000,000, on its books to cover all possible losses.

* * *

The WITNESS. Well, I think probably this would happen as a practical matter: if the Company had been setting aside a reserve for abandoning based on production, it would be approximately this amount, maybe not to the dollar.

By Mr. MILDE:

Q. Well, Mr. Dunn, the fact of the matter is that the Company couldn't have set it aside, the Company couldn't have set aside an accrual for abandoning wells that it would have in 1938, and also continue what was then the accepted and required accounting practice of charging well-abandoning costs to operating

3635 expenses as the abandoning costs were incurred; isn't that so?

A. Oh, well, you have presented me with two alternatives, they either do one or the other.

Q. And they followed the alternative of charging well-abandoning costs to operating expenses as they occurred?

A. That is what they actually did: yes.

Q. That is right. And following that alternative, they couldn't possibly, as a practical matter, have also accrue a sum of money to take care of future abandoning costs on the theory that that should be provided for by accruals rather than as a current charge, could they?

Mr. SPRINGER. The question isn't clear. The sum of money refers to what? May we have that read?

(The question was read by the reporter.)

Mr. SPRINGER. Is that sum of money a reserve or a fund that you are talking about?

Mr. MILDE. Are you asking me?

Mr. SPRINGER. Yes, sir; it isn't clear, Mr. Milde.

Mr. MILDE. Well, the question is whether it is clear to the witness.

TRIAL EXAMINER. Do you understand the question?

Mr. SLAFF. We have a right to have it made clear to counsel, too, so that we can know whether to object to the question. It is a perfectly proper inquiry by us as to what is meant by the use of that term.

3636 TRIAL EXAMINER. All right.

Mr. SLAFF. If counsel knows what he means.

TRIAL EXAMINER. Just what do you mean by the use of that phrase, that language?

Mr. MILDE. Well, let me rephrase the question.

By Mr. MILDE:

Q. It is perfectly clear, is it not, Mr. Dunn, that as a matter of practical accounting, starting from the beginning of the Company's operations, that it could not have handled well abandoning costs on two theories at the same time?

A. I think that is perfectly clear; yes, sir.

Q. And having adopted the practice, and being required to adopt the practice, under the subsequent West Virginia Commission Code of Accounts, of charging well abandoning costs to operating expenses as they occurred, they could not, the Company could not, as a practical matter, have also handled them on this accrual theory?

A. Well, you have got a statement in there to the effect that the West Virginia Commission required them to do this. Now I am not sure that if they had applied to the West Virginia Commission and asked for permission to create a reserve, that they wouldn't have given it to them. So I would like not to answer that part as to the requirements of the West Virginia Commission, because I don't know what they would have ordered in that case.

3637 But I will say this, that had they provided a reserve for well abandonment costs, the costs of abandoning should be charged to it; and if they didn't have a reserve, naturally they would charge it to operating expenses.

Q. Now, Mr. Dunn, the question I asked you is this, and I think you can answer it—and this time I will leave out the West Virginia Commission if it will please you any—that following the practice, right from the beginning, of charging well abandoning costs to operating expenses as they occurred, the Company could not, as a matter of practical accounting, have also accrued a reserve for future abandoning costs on the theory that is presented in your exhibit?

A. I don't believe they could have done that exact method. Of course, what would have happened is that they would have arrived at approximately the same result, as I have already testified.

Q. Well, we are perfectly clear, are we not, that they couldn't, as a matter of practical accounting, have done it both ways?

TRIAL EXAMINER. At the same time?

Mr. MILDE. At the same time.

The WITNESS. No; because of the fact that at that time they didn't know exactly what these present existing wells at 1938 were.

By Mr. MILDE:

3638 Q. Well, that is one reason, and the other reason is that you wouldn't possibly handle an operating expense on two different accounting theories which are different, at the same time, would you; that is, you wouldn't follow two theories simultaneously, would you?

A. No, indeed.

Q. And as you pointed out, the Company couldn't possibly have known in its past history, commencing in 1898, that on December 31, 1938, it would have approximately 3,261 wells, could it?

A. No; it wouldn't have known that.

Q. And they wouldn't have known in 1898 that at present price levels it would cost $1,007 to abandon those wells, would they?

A. They might have come to a figure approximating that. I wouldn't say that they couldn't have known that; no.

Q. They couldn't have estimated, back in 1910 or 1911, that the price level by 1938 would be substantially higher, could they?

A. Well, after all, they could very well estimate a cost which might come close to this, and it might even be higher, I don't know.

Q. By the way, do you think that when a company is setting aside reserves, it should include in its consideration the fact that the price levels may change in the future?

3639 A. No; the reserves are for the purpose of writing off the original cost of the property over its useful service life.

Q. Let me ask you one other thing about this $1,007, Mr. Dunn. The fact is that that is cost based on 1939 prices for abandoning, is that not so?

A. I got the cost from the engineering division.

Q. And didn't they advise you that that was based on 1939 prices?

A. No; they did not. I don't recall if they did, they may have.

Q. Now also, Mr. Dunn, it wouldn't have been possible, would it, for the Company to have known, in 1898, for any year right up to 1939, that its production property would be segregated into these pool areas, as testified to by Mr. Ross?

A. Well, had they made a similar study, they might have arrived at the same result.

Q. Well, they couldn't possibly have known that in 1941 Mr. Ross would come along and find certain pool areas in the Company's production property, could they?

A. Well, they probably didn't know that Mr. Ross would do it; no.

Q. Or that anybody would do it?

A. Well, they might have well expected that somebody might investigate their system at some time or another.

Mr. SLAFF. That was a reasonable expectation, you mean?

3640 The WITNESS. Yes, sir.

By Mr. MILDE:

Q. And also you think it is a reasonable expectation that the Company should have had, that this future geologist would divide its production up into these particular pool areas; do you think that that was a reasonable expectation?

A. From what I have learned, or from what I have heard the geologists say in the time I spent in the gas business, it is quite usual to divide production up into pool areas if it is at all possible.

Q. Well, the fact is that you have used these pool areas to arrive at your $2,107,000 accrual figure, haven't you?

A. Oh, yes; I have used them.

Q. And isn't it a fact that these accruals which you make for future cost of abandoning the present wells aren't based on the production and reserves of these particular wells?

A. It is my recollection that they are, but I would have to check to see the figure I used.

Q. I think that is rather important, Mr. Dunn. Will you check it, please?

A. I will have to go upstairs to get my work papers. I didn't bring the depletion work papers down.

Q. We have some copies of your work papers here. Can

3641 you use those?

A. Yes; I believe so.

(After a pause.)

The WITNESS. Will you read the question, please?

(The question was read by the reporter.)

The WITNESS. These wells are included in those production figures; yes.

By Mr. MILDE:

Q. I think you know what my question means, Mr. Dunn. Will you try to answer it more fully? Are they or are they not—and when I refer to "they," I mean these accruals of yours—based upon the production and the reserves of these particular 3,261 wells?

A. You mean—and no other wells—is that what you mean?

Q. That is what I asked you.

A. Yes; I will say, then, that these wells are included in those figures, and also all other production of the Company is included for any well that they had prior to 1938.

Q. That is right. These accruals for the cost of abandoning those 3,261 wells that the Company had on December 31, 1938, are based on the production and the reserves for all the wells the Company ever had, right down to December 31, 1938; isn't that so?

3642 A. That is correct.

Q. And the answer to my question as to whether or not these accruals for the future costs of abandoning these present wells are based on the production and the reserves of only those wells, is that they are not; isn't that so?

A. Well, if you would ask a direct question as to what they are based on, I could answer it directly. But if I answered it any other way, it might leave the impression that they were not included, which they are.

Q. Well, they are included with all the other wells the Company ever had, that is all you are saying?

A. That is right.

Q. And if I ask you again whether or not these accruals are based solely upon the reserves and the production of the particular 3,261 wells for which you develop these future accruals, the answer to that is what?

A. The answer is that they are not based solely on these 3,261 wells, but the word "solely" you did not use before.

Q. Do you know how many wells, Mr. Dunn, are included, or the production of how many wells is included, in the figures which you added to the production and reserves of these existing wells?

A. No; I didn't count them. It was the wells the Company had in the past, whatever wells it produced gas from in

3643 the past entered into this calculation.

Q. It is a matter of thousands, isn't it?

A. Yes.

Q. And it includes wells for which you have not allowed drilling costs in the adjusted book costs of the Company's properties, and the wells for which you have allowed some costs in the adjusted book costs?

Mr. SPRINGER. That is hardly properly phrased. What does he mean by "have not allowed drilling costs"? Is he talking about the costs that were expensed by the company in the past?

TRIAL EXAMINER. I don't know what he means.

Mr. MILDE. Well, Mr. Examiner, I think we have developed here, rather frequently, that in the adjusted book costs the Power Commission's accountants, including Mr. Dunn, have not included any drilling costs in their adjusted book costs for some 2,300 of the Company's existing wells. What I am now asking Mr. Dunn is, when he prepared this hypothetical accrual for these future abandoning costs, if he hasn't considered the production for both wells for which he has allowed drilling costs in the adjusted book costs, and those for which he hasn't.

Mr. SLAFF. Then I object to any question being put to him on the basis of a hypothetical accrual, when Mr. Dunn has testified that it is not a hypothetical accrual.

TRIAL EXAMINER. Well, that word wasn't used in the question, I believe.

3644. Mr. SLAFF. Well, as I understood it, it was explanatory of what was intended by the question.

TRIAL EXAMINER. I think that should be stricken out, if the explanation is to be considered part of the question.

Mr. MILDE. I think there is no question but that it is hypothetical——

TRIAL EXAMINER (interposing). Maybe you might use the term "so-called," or something like that.

By Mr. MILDE:

Q. Let me use the term "computed reserve." I think you will agree that this is purely a computed reserve, will you not, Mr. Dunn?

A. I guess all reserves are computed.

Q. And computed by you here. Now can you answer that question, with the explanation made to the Examiner?

A. I can answer the question, I believe. I can answer it by saying that the total gas produced up to 1938, by years, has been included in this calculation, and that also the gas recover-

able from the wells in service as of December 1938; and it seems to me that you don't completely understand this, and if you want me to explain just what I did, I will be glad to do it at this point.

Q. Well, I am sorry, you didn't quite answer my question, Mr. Dunn. Will you tell me now whether or not, in the past
3645 production which you have used to develop this computed total annual accrual of yours, you have not used production from wells for which you have allowed drilling costs in the adjusted book costs, as well as for wells for which you have not allowed drilling costs?

* * *

The WITNESS. When I answered by saying total production, I meant both types of wells.

3646 By Mr. MILDE:

Q. And by "both types" now you mean wells for which you have included drilling costs in your adjusted book costs, and wells for which you have excluded drilling costs, do you not?

A. That is correct.

Q. Now, Mr. Dunn, going back again to page 32 of your detailed schedule, column (b), let me ask you if your figures don't contemplate that of the $3,285,000 of cash which the Company must have to abandon the wells existing as of December 31, 1938, your method provides for the recovery of only $1,177,000, in round numbers, in the future?

A. Well, I am inclined to answer that yes; if I understand your question perfectly.

Q. Well, I think you do, Mr. Dunn; and it is perfectly clear, is it not, that all you have to do is to find out what this total cost is, which is $3,285,000, which will be incurred in the future, and you deduct from that $2,107,000, which you have set up in your lines 33 and 35; and that means that after 1938, by your method, the Company will recover the difference between $2,100,000 and $3,285,000, or $1,177,000?

A. On these particular wells.

Q. That is what we are talking about, these particular wells. And the fact of the matter is that your computation
3647 provides that when the Company actually spends this $3,285,000 in the future, as these existing wells are abandoned, it will draw down on the $1,177,000 which you are going to allow it in operating expenses in the future, and for the bal-

ance of the cost of $2,100,000, it has just got to take that out of its own pocket, hasn't it?

Mr. SPRINGER. Wouldn't it be more accurate to say that the rate payer would pay the operating expenses?

Mr. MILDE. No; I am sorry, Mr. Springer, but a rate payer pays for gas, not for operating expenses.

Mr. SPRINGER. It must include operating expenses.

By Mr. MILDE:

Q. Well, isn't it perfectly clear, Mr. Dunn, that under your method you are going to provide, starting in 1939, in operating expenses, by your accruals here, $1,177,000 to take care of these future abandoning costs, and that is all, from 1939 on; isn't that so?

A. Well, I would say that we start from 1913 to make provision for the total, and I don't see what particular significance 1939 has. If we are considering operating expenses in 1938, then we provide $56,000 in that year; if we consider operating expenses in 1937, we have provided $75,000 in that year, plus whatever cost of abandoning has been charged to expenses.

Now if those years have no significance, we will start
3648 with 1939.

Q. Well, Mr. Dunn, isn't it a fact that the only money the Company will get for this future $3,285,000—that is, get in fact—is the amount you allow, or the Commission allows, in operating expenses by way of accrual for this future cost, starting in 1939 when this new system of accounts went into effect?

A. The amount that they will get in operating expenses will be largely determined by the years in which they consider operating expenses. If they do not consider the years 1937 and 1938 in operating expenses, your statement is correct, that is all they will get.

Q. So in fact, the Company is going to be allowed to recover only $1,177,000, and the $2,100,000 which you have assumed has been accrued in the past, will have to be provided out of what funds or property it now has on hand, won't it?

A. I would say no.

Q. Well, where is it going to get the $2,100,000?

A. If in fact the Commission allows 1937 and 1938 operating expenses in their estimate or allowance for operating costs, and considers them, then they will, in fact, get $75,000 for this accrual in 1937, and another $73,000 for cost of abandonment, which has been included in operating expenses in 1937; and the

same thing will be true for 1938, except that the amounts
3649 are slightly larger in the case of cost of abandonment, which is $82,000, and the other figure is $56,000.

Q. That brings your figure down to a little bit below $2,000,000. Where will it get the $2,000,000?

Mr. SLAFF. Do you understand that question?

The WITNESS. I certainly don't understand that last question.

By Mr. MILDE:

Q. As I understand it, what you have done is to refer to page 32, lines 32 and 31, and said that if the Commission took 1937 and 1938 operating expenses into account, the Company would get $75,800 in 1937, and $56,169 in 1938, on your method, plus some amounts which you mentioned for the actual cost of abandonment that was incurred by the Company in those years, following its old practice?

A. That is right.

Q. And in that connection, Mr. Dunn, of course these additional amounts you mentioned, which you say the Commission will allow, was not for the cost of abandoning any of these present wells, was it?

A. Nevertheless, it is a cost, and a cost of abandoning gas wells, and that is what this problem is devoted to. I don't know what your distinction is there. It is a cost of abandoning gas wells actually incurred, and you have brought out very clearly the fact that this has been charged to expense, and we must consider
3650 the fact that it is charged to expense.

Q. Well, Mr. Dunn, we are taalking now about the cost of abandoning the 3,261 wells which were in service on December 31, 1938, are we not?

A. Yes; we are talking about——

Q. (Interposing.) That is what this whole accrual of yours is for isn't it?

A. That is correct.

Q. And you have pointed out that in 1937 and 1938, if the Commission follows your method, the Company is going to get $75,000 and $56,000 in operating expenses towards the cost of abandoning the wells in existence at the end of 1938?

A. That is right.

Q. And that is all that it is going to have towards that cost, is it not, in those years?

A. It is also going to have another feature which, if we had not included it in operating expenses, would have been included

here. Therefore, they will get more. That is directly related to this problem, and I tried to explain that a while ago, that you didn't seem to understand, but you apparently did not want to hear my explanation.

Q. I am afraid I understand it too well, Mr. Dunn. Let me ask you if it isn't a fact that excluding the $75,000 and the $56,000, which you show in your lines 31 and 32, which make $130,-
3651 000, roughly, that the Company must just dig into its own pocket, out of its cash resources, or borrow from somebody if it doesn't have the cash resources, to pay the $1,900,000 of future abandoning costs?

A. I believe what they will actually have to pay in the future will be determined solely by what the Commission allows in operating expenses. If they allow the method that I have set up here, there will be an allowance in operating expenses of $75,000 a year in 1937, plus the amount they actually spent that year to abandon wells——

Q. (Interposing.) That is for wells in the past, isn't it?

Mr. SLAFF. Have you concluded your answer?

The WITNESS. No.

Mr. SLAFF. Please finish it.

The WITNESS (continuing). As to just what they would have to dig into their pockets for, would be rather a complicated calculation that I just can't make right here.

By Mr. MILDE:

Q. Mr. Dunn, it is perfectly apparent from what we have developed, is it not, that on your method of accruing for future well abandoning costs, all that you provide towards that future cost of $3,285,000 is whatever the accruals are from 1939 on, as I suggested to you, or from 1937 on, as you suggested?

A. Yes.

3652 Q. And that at the most, that would make, say, $1,300,000, or thereabouts, of future accruals towards this total future cost of $3,285,000; isn't that right?

A. Yes; I believe that is correct.

Q. And all I am suggesting to you is that the balance of the $2,000,000, or approximately $2,000,000, the Company just has to provide for out of some other source, does it not, than these accruals from 1937 or 1939 on?

A. Or has possibly provided for in the past.

Q. And the net effect of what you are doing—let me ask you this: Wouldn't you think it fair, if you are going to shift over to a new system of accounts, new system of accounting on well abandoning costs, whereby you are going to set up an accrual rather than charge your well abandoning costs currently as wells are abandoned, to say, "All right, we will set up this new system now, but in fairness we have got to let the Company set up that accrual over the remaining life of these existing wells"?

Don't you think that would be a fair way to do it?

A. I am afraid that would be a violation of accounting principles, and not fair.

Q. You don't think that would be a fair way to do it?

A. Not considering this case; no.

Q. Do you think it would be a matter of proper accounting principles to let the Company continue to charge well
3653 abandoning costs to operating expenses as the wells were abandoned?

A. That would not violate any accounting principle. It would not be conservative accounting, though, I don't believe.

Q. So that it would be perfectly proper accounting practice to continue to charge well abandoning costs to operating expenses as they occur, wouldn't it?

A. I wouldn't say "perfectly proper." I think the Company realized the need of providing a reserve when they started one themselves in 1932. So it is proper, but I would say not eminently proper.

Q. Well, everybody considered it so, did they not, for 20 or 30 years?

A. That is right, they considered it proper accounting.

Q. All right.

Now if that happened, Mr. Dunn, the fact of the matter would be that as these wells were abandoned in the future, 10, 15, or 20 years hence, whatever it might be, some each year, the Company would be reimbursed their $3,285,000?

A. That is right.

Q. Now——

A. (Interposing.) Wait a minute. I will have to qualify that as to what they will actually be reimbursed. This, of course, could present an extraordinary loss of $3,000,000 here,
3654 and whether or not the rates will be high enough to cover it, or could possibly be high enough to cover it, I don't know. So I can't say they would actually be reimbursed on it.

Q. On this method of accounting they would be reimbursed, would they not?

A. If the rates were high enough to cover any loss, no matter in what year incurred, they would be reimbursed.

Q. Of course, if rates are not high enough, Mr. Dunn, they just aren't high enough to cover expenses—that is all you are saying?

A. That is right; so I can't guarantee that they will be.

Q. Well, now——.

TRIAL EXAMINER (interposing). You have to assume they will be?

The WITNESS. Yes.

By Mr. MILDE:

Q. Now if we followed that method of accounting, the Company would get back its $3,285,000. Now if we say, "Well, we don't like this method of charging well abandoning costs to operating expenses as wells are abandoned; we ought to begin to accrue a reserve"—isn't it a fact that the only way that the Company can be reimbursed this total of $3,285,000 is to accrue that reserve over the remaining production of these existing wells?

3655 A. By no means.

Q. You don't think that that is a fact?

A. I know it is not a fact.

Q. And isn't it a fact that what you have done is to provide for accruals, either from 1937 or 1939 on, towards this actual cost of $3,285,000, of $1,200,000 or $1,300,000, such as we have developed before—that is all you have provided towards that actual future cost, isn't that so?

A. Well, by looking at this total in column (b), page 32, you will see exactly what is provided here.

Q. Well, I think you can answer that question, Mr. Dunn, directly.

A. Well, I will answer it this way, that I have earmarked certain expenses in my calculations as being provisions for this cost. Now they are not earmarked as such on the Company's books. However, should the Company desire or find it necessary to set up this reserve, there is certainly a balance available on the books to transfer to this amount, and many millions of dollars left over. So in fact, the amount has been provided for.

* * *

3656. Well, let me ask you again, Mr. Dunn: What you are assuming is, is it not, that approximately $2,000,000 of these future abandoning costs which the Company has to

3657 pay out in cash, will be, in effect, supplied by using up a part of the reserves which the Company has set up on its books in the past?

A. Yes; that is correct.

Q. And it is perfectly clear, is it not, Mr. Dunn, that in the Company's past reserves, there has at no time been any provision made by the Company specifically for the future abandoning costs of future wells?

A. That is correct.

Q. Referring again to page 32, Mr. Dunn, let me ask you if these figures in your totals, under column (b), don't really constitute a reaccounting all the way back over the Company's history, for the abandonment reserve for existing wells?

A. I don't know whether you would call it "reaccounting" or not. It is a revised depreciation reserve all the way through, of which this is one small part, maybe a substantial part, and it is due to the fact that the Company now has an excess amount of accrued depreciation.

Q. Well, this is just reaccounting backwards over the history of the Company from December 31, 1938, back to 1898, for a reserve for abandoning costs of present wells, which reserve the Company never had?

Mr. Springer. I object. He has already said it wasn't a "reaccounting."

Trial Examiner. Yes, he certainly has. I don't see any reason why he shouldn't say "no" again, though.

3658 Mr. Milde. He didn't say that, he said he didn't know whether he would call it exactly that.

By Mr. Milde:

Q. But in substance it is a reaccounting, isn't it, Mr. Dunn?

A. I would call it a revised reserve for depreciation, of which this is one part, made necessary by the fact that the Company's book reserve could not be used in this case.

Q. Well, let me ask you this, Mr. Dunn: Isn't it a fact that you have set up these figures on page 32 on the assumption that this Commission's Uniform System of Accounts has been in effect for these present wells since the beginning?

A. No; not on that assumption, particularly.

Q. Well, generally, you have assumed that under the present System of Accounts a reserve for future abandoning costs should have been set up, and you have proceeded to set it up for these 3,261 wells, haven't you?

Mr. SLAFF. I object to that. There are two questions there. You have assumed something and you have done something—those are the two questions. I object to the two questions in one.

TRIAL EXAMINER. Read the question.

(The question was read by the reporter.)

TRIAL EXAMINER. Have you assumed that it should be set up?

3659 The WITNESS. I didn't assume that under the present System of Accounts, because I don't think there is a word in the present System of Accounts that even mentions such a problem as this. It is just ordinary accounting practice which the System of Accounts also follows.

By Mr. MILDE:

Q. Well, that last answer of yours is rather interesting, Mr. Dunn.

If there is nothing in the Commission's present Code of Accounts on well abandoning costs, why didn't you just carry out the past practice of the Company, permitting it to charge well abandoning costs to operating expenses as they occurred?

A. Well, I felt that an amount like that of $3,000,000, a known cost to be incurred in the future, should be provided for by this Commission, and it is eminently proper that they should recognize that and provide for it.

Q. Of course, that $3,285,000 would have been provided for by currently charging well abandoning costs as wells were abandoned, wouldn't it?

A. In such a cost as that, it is well to provide a reserve for it. That is what a reserve is for, to take care of such extraordinarily large expenses in future operating costs.

Q. And it is a fact that if the Company's past accounting practice had been carried out, then over the future years, as these existing wells were abandoned, the Company would be

3660 allowed to charge in operating expenses this $3,285,000 as the wells were abandoned; isn't that a fact?

A. That is correct.

Q. And isn't it a further fact that by this shifting theory of yours, which you——

Mr. SLAFF (interposing). I object to that right now, because it is obviously an improper characterization, and there is no point in going on with the rest of the question.

By Mr. MILDE:

Q. Isn't it a further fact, Mr. Dunn, that by this method which you have used—and I understand that you say it is not required by the present Code of Accounts, is that right?

A. I don't think it is specifically required. There is an implication in the Code of Accounts that costs of abandoning should be charged to a reserve, but of course there must be a reserve provided for in order to charge it to that.

Q. Isn't it a further fact, then, that by this method which you have used here, you have and you will permit the Company to charge from either 1937 or 1939, whichever you select, only $1,300,000 in current operating expenses towards this future actual cost of $3,285,000?

A. That is right, that is all that can be charged in addition to the amount already provided.

Q. And if there had been no change in the past practice
3661 which the Company has followed for 40 years, it would have recovered, in current operating expenses, not $1,300,000 as you provide, but this actual $3,285,000 cost?

A. That is correct.

TRIAL EXAMINER. We will take a recess of 10 minutes.

(Whereupon, a 10-minute recess was taken, after which the hearing was resumed.)

TRIAL EXAMINER. You may proceed, Mr. Milde.

By Mr. MILDE:

Mr. Dunn, these total figures on page 32, you carry over to column (f) on Schedule No. 2 at page 25, do you not?

A. Yes, sir.

Q. And you show there, in lines 33 and 39, under column (f), this figure of $2,107,000 of computed accruals that we have been talking about, do you not?

A. Yes, sir.

Q. Now isn't it a fact that that $2,100,000, you add in line 39 to your reserves for Operated Acreage, Field Line Right-of-Way and Construction Cost, and Gas Well Construction, to give you a total figure of $6,612,000?

A. I do.

Q. And referring to column (b), line 40, you show an adjusted original book cost, as you phrase it, of $9,956,000, do you not?

A. Yes.

3662 Q. And that is composed of your adjusted book cost of Operated Acreage, as shown in column (c); and Field

Line Right-of-Way and Construction Cost, in column (d); and your Gas Well Construction Cost, in column (e); is it not?

A. That is right.

Q. Now, then, you deduct from that $9,956,000 this figure of $6,612,000, as shown in line 41, isn't that so?

A. Yes, sir.

Q. Which includes this $2,100,000 of computed accruals for future well abandoning costs?

A. That is correct.

Q. And you deduct that and get a net book cost of $3,343,000?

A. Yes, sir.

Q. And isn't it a fact that the effect of that deduction is to reduce, by $2,100,000, your net book cost of Operated Acreage, Field Line Right-of-Way and Construction Cost, and Gas Well Construction?

A. That is true; it does reduce that.

Q. And if you hadn't worked this computed accrual for future well abandonment costs, into your reserves for Operated Acreage, Field Line Right-of-Way and Construction Cost, and Gas Well Construction, you would have shown a net book cost for those properties of about $5,451,000, wouldn't you?

A. Yes, sir.

3663 Q. So really the effect of your computed accrual is to eliminate $2,100,000 of the net book cost of Operated Acreage, Field Line Right-of-Way and Construction Cost, and Gas Well Construction Cost?

A. That is correct.

* * *

Q. Will you turn to Schedule No. 3 at page 34? This is your summary schedule for production plant, is it not?

A. It is the depreciable property in the production plant.

Q. Whereas, your Schedule 2, which we last referred to, was the depletable property in the production plant?

A. Yes, sir.

Q. I notice that the second line of this Schedule No. 3, Mr. Dunn, says "Annual and Accrued Depreciation." Isn't

3664 that so?

A. Yes, sir.

Q. Which figure on this Schedule No. 3 represents accrued depreciation in the production plant?

A. The amount shown on line 53.

Q. Line 53, which reads "Total Reserves for Depreciation of Production Plant as Adjusted, December 31, 1938"?

A. That is correct.

Q. And that figure is $8,673,000, in round figures?

A. Yes, sir.

Q. And doesn't that same figure appear at line 55, called "Adjusted Depreciation Reserves"?

A. It does.

Q. And immediately above is the figure of $16,352,000, called "Adjusted Original Book Cost"?

A. Yes.

Q. Now you say that $8,600,000 is accrued depreciation. What is the percent of accrued depreciation, as you determined it on this Schedule No. 3, for the total production plant—depreciable property?

A. Roughly, slightly over 50 percent.

Q. Well, isn't it 53 percent, Mr. Dunn?

A. I don't have the figure before me. I suppose it would be about 53 percent.

And that leaves a net book cost of production plant
3665 of about 47 percent, does it not?

A. Yes, sir.

Q. As derived from the figures in column (b)?

A. Yes.

* * *

3668 Q. Mr. Dunn, will you tell me what you mean—and not what Mr. Smith means—by the term "accrued depreciation" as used in the heading of Schedule No. 3 and in the headings of your other Schedules throughout this exhibit?

A. That represents the actual existing depreciation in the property, and it is determined by spreading the service value over the service life, in this case original cost.

Q. Now will you tell me what you mean by the term "actual existing depreciation?"

Mr. SPRINGER. Well, Mr. Examiner, that is pretty obvious, isn't it?

3669 TRIAL EXAMINER. If it is, I don't see any reason why he shouldn't state it.

The WITNESS. It is the amount of the cost of the property that has been consumed in gas service.

3670 By Mr. MILDE:

Q. You don't consume a cost in gas service, do you, Mr. Dunn; you consume property?

Mr. SLAFF. I object to that. Again he has got two questions in one.

TRIAL EXAMINER. All right, separate the questions, please.

Mr. MILDE. Will you read that last answer?

(The answer was read by the reporter.)

By Mr. MILDE:

Q. What I am now asking you, Mr. Dunn, is whether it is cost or property that is consumed in gas service?

A. Well, undoubtedly both.

Q. Well, as I understood it, you were defining "actual existing depreciation" in property; is that right?

A. I have identified this as being cost dollars.

Q. Then, when you defined accrued depreciation as the actual existing depreciation in the property, you didn't quite mean that, did you?

A. Well, if the word "depreciation" is understood to mean depreciation in dollars, that is exactly what I meant.

Q. Well, wouldn't it be more accurate to say that what you mean is actual existing depreciation in the cost of the property?

A. I am not exactly sure as to just what that would
3671 mean. If it means the same as I defined it, then it is right.

Q. Well, you are not really dealing with property here at all, are you; you are dealing with costs as you have adjusted them?

A. The cost is, of course, directly related to certain property.

Q. And I want to know whether, when you say "accrued depreciation" as you do throughout this exhibit, you mean accrued depreciation as existing in the company's properties, or whether you are talking about accrued depreciation existing in the book cost or some other cost?

Mr. SLAFF. I object to that. He has answered it several times.

TRIAL EXAMINER. Go ahead and answer it again.

The WITNESS. I mean in terms of the original cost of the property.

By Mr. MILDE:

Q. So this phraseology "accrued depreciation" or "actual existing depreciation" is related solely to the cost of the properties as you have determined them; is that so?

Mr. SPRINGER. I object, Mr. Examiner. Mr. Smith has been the witness on the principles of depreciation, and he has defined very definitely what "actual existing depreciation" is. He says: "Actual existing depreciation is the expired, diminished,

or consumed service life, which I also term the economic
3672 life of a utility's depreciable plant." He has stated that
at page 2831 of the transcript. Mr. Smith designed this exhibit and supervised Mr. Dunn, and I think the question should be presented to Mr. Smith, although it is very plain from the transcript already what the term means.

Mr. SLAFF. I might add, Mr. Examiner, in line with Mr. Springer's statement, that we have Mr. Smith here and he has been here all the time and is ready to be produced on cross-examination of his direct testimony on the subject of depreciation at any time that the company indicates that it desires to examine him on cross-examination on the subject of depreciation.

Mr. MILDE. Read the last question, please.

(The question was read by the reporter.)

Mr. MILDE. I think I am entitled to an answer to that question, Mr. Examiner.

TRIAL EXAMINER. I don't understand just exactly what the fact that Mr. Smith has defined certain terms here, and the fact that Mr. Smith is available for cross-examination has to do with the use of those definitions and the application of those definitions in the preparation of this exhibit.

Now, I assume that this witness necessarily applied those principles, and the purpose of the question, it seems to me, is to determine just exactly how he construed them, and how he applied
them in this case. It seems to me to be perfectly proper
3673 cross-examination, and the objection is overruled.

The WITNESS. The reserve does apply to the original cost of the property. I wouldn't want to say "solely," because depreciation reserve is a very broad term, and I don't know for what purpose the word "solely" was inserted.

By Mr. MILDE:

Q. I wasn't asking you about your reserve, I was asking you about the term "accrued depreciation," or "actual existing depreciation," as you subsequently stated it.

A. And that also is synonymous with the reserve for depreciation, as shown on line 53.

Q. Then we are perfectly clear that that relates to the cost; is that right?

A. That is right.

Q. And we are not talking about accrued depreciation or actual existing depreciation in the sense that an engineer would deter-

mine that, or in the sense that an engineer might find that in the physical properties?

Mr. Reeder. I object to that.

Mr. Springer. I object to what an engineer might do.

Trial Examiner. Objection sustained.

By Mr. Milde:

Q. Let me ask you, Mr. Dunn, if it isn't a fact that this accrued depreciation, this actual existing depreciation, and this depreciation reserve of yours—which you say are synonymous;

3674 isn't that right?

A. That is right.

Q. (Continuing.) Is merely the sum of annual accruals that you have computed as applying to the adjusted book costs of the properties less retirement losses charged against this reserve, that you charged against the reserve?

A. That is absolutely correct.

Q. Now, referring you again to schedule No. 3, page 34——

A. (Interposing.) Wait a minute. There is liable to be a misunderstanding there. There are a few other items set forth on this exhibit, composing the accrued depreciation, which you will notice are reserves acquired from other companies. That also enters into the determination of the total, outside of the specific provisions set forth here.

Q. Well, we will come to that a little later, but let me just clarify your answer, if I may, Mr. Dunn. What you mean is that in addition to these accruals that you have worked out, you have added reserves acquired from other companies; that is what you are saying now, isn't it?

A. Yes, sir.

Q. So that we add some company bookkeeping figures to your exhibit figures, or you added the company's bookkeeping figures to your exhibit figures on these reserves?

A. Some company cost figures, which are also bookkeeping figures.

3675 Q. Company inherited reserves, isn't that what you are saying now?

A. I said acquired reserves.

Q. Now, referring again to schedule No. 3, on page 34, your first item there is "structures," is it not, column (c)?

A. Yes.

Q. And that has an adjust book cost of $212,000, as you show it in line 5; isn't that so?

A. Yes, sir.

Q. Now, that is a relatively small portion of the depreciable part of the production plant; is it not?

A. Yes, sir; that is.

Q. And for that reason I would like to turn to column (d), which is Field Line Material, Measuring and Regulating Station Equipment, where you show an adjusted book cost of $7,934,000; isn't that so?

A. Yes, sir.

Q. And that is almost half of your total for this property shown in column (b); is it not?

A. Yes.

Q. Now, under your line 5 there appear the figures 2.22 percent for this Field Line Material, column (d), and similar figures of 4.17 percent, 2.50 percent appear under columns (c) and (e); do they not?

A. Yes.

3676 Q. Now, those are the annual depreciation rates supplied to you by Mr. French, are they not?

A. That is correct.

Q. You made no investigation yourself as to the reasonableness or unreasonableness of those depreciation rates?

A. I did not.

Q. And if any of those rates should be in error as a matter of mathematical judgment, your computations, using those rates, would carry through those same errors, would they not?

A. They would reflect an error to that extent; yes, sir.

Q. Now, I would like to develop with you, Mr. Dunn, your general method as to what you did with Mr. French's rates, and using column (d) as an illustration, the column (d) relating to Field Line Material, isn't it a fact that you have applied Mr. French's 2.22 percent rate to the average book balances in the company's field line material account, from 1898 down to 1938?

A. That is correct.

Q. And those are simply the average plant balances as they were set up by the company; isn't that so?

A. They weren't exactly set up this way. We made a reclassification or redistribution of certain accounts in order to group them. That is, the company didn't use the same account all the way through, and sometimes they overlapped.

3677 Q. What you mean, Mr. Dunn, is that you simply regrouped the figures as appearing on the company's books

for gross plant balances, into these categories of Structures and Field Line Material, and so on?

A. They have been so grouped.

Q. But they are the company's book figures?

A. Yes, sir.

Q. And you haven't made any adjustments retroactively to those book figures from 1938 back to 1898, have you?

A. Not on this account.

Q. Well, you haven't on any accounts, have you, except to eliminate the plant balances for the property used to transport coke-oven gas?

A. I recall one other adjustment——

Q. (Interposing.) Well, did you make that one?

A. Yes, we made that one; and then we included $1,400,000 in the year 1920, which the company for some reason wrote off to expense, but which we felt should not have been written off. So we naturally included that in a retroactive manner.

Q. And did you put that in retroactively as of the year in which you restored that to plant account?

A. Yes; rather than trying to divide these costs up into five years, of which only some portion remained, we took 1920 as the average year.

Q. But, apart from those two adjustments, you have
3678 simply taken the company's plant balances, per books, and applied Mr. French's rates each year to the average plant balance for that year?

A. That is correct; that is the only adjustments that I recall.

Q. And isn't that what these figures are in lines 6 to 46 under column (d)?

Mr. SPRINGER. Mr. Milde, does that previous question refer to the restoring of the annual allowances which appear on page 34 in lines 6 to 46?

Mr. MILDE. That is true; the accruals.

The WITNESS. Yes.

By Mr. MILDE:

Q. In other words, Mr. Dunn, that $28.26 that appears in line 6 under column (d) for the year 1898 is 2.22 percent of the company's average plant balance for 1898 for field line material?

A. Correct.

Q. And so on down through each year?

A. Yes.

Q. And in the year 1938, as shown on line 46, for example, the $180,000, speaking in round figures, is 2.22 percent of the gross plant balance as shown on the company's books for the year 1938, averaged as between the beginning and the end of the year?

3679 A. That is correct.

Mr. SLAFF. Can I have that question back again, please?

(The question was read by the reporter.)

Mr. SLAFF. I am not clear as to whether that is the balance on the company's books or the balance on the company's books as adjusted by Mr. Dunn, and the application of the percentage made to that.

The WITNESS. That is the amount as adjusted for the 1938 balance.

By Mr. MILDE:

Q. You say that for the year 1938 it is the amount as adjusted by you, Mr. Dunn?

A. It is not; it is the average for the year, and the adjustment is only effective as of December 31, and I did not make it retroactive in any manner.

Q. Well, in order to clarify Mr. Slaff on this, Mr. Dunn, you have not reflected back to the year when they occurred, the adjustments which you made as of December 31, 1938, in connection with your determination of adjusted book costs, have you?

A. Outside of the items noted, there has been no adjustment made back.

Q. Outside of the coke-oven gas property, and that $1,400,000 to which you previously referred?

A. That is right.

3680 Q. And your 2.22 percent rate in 1938, 1937, 1936, and so on, has been applied to what the company's books show or showed as of those years for gross plant cost of field line material, and so on?

A. Correct.

Q. You have assumed in this calculation, have you not, that the company's properties—and when I talk of "properties" in connection with this examination here, I am referring to the properties that are comprised in the accounts we are looking it. You have assumed, have you not, that in 1898 the company's field line properties, as then existing, were depreciating at the annual rate of 2.22 percent?

A. That is correct.

Q. And in 1899 at 2.22 percent?

A. Yes.

Q. And so on down through the years, right down to 1938?

A. Yes, sir.

Q. And isn't the general method of approach that you have used here, to set up a reserve that the company would have accumulated if it had started in 1898 and had applied Mr. French's rates as he has now determined them, to the plant balances?

A. Yes; I believe that is the result.

3681 Q. Let me ask you if this first set of figures in lines 6 to 46 don't represent merely the accruals on that theory?

A. That is correct; those are the provisions; annual provisions.

Q. That is, that is what the company would have accrued if it had done what we have just talked about?

A. Yes, sir.

Q. And against that of course you have to, on your theory, make certain retirements and deductions and so on?

A. Yes, sir.

Q. Now I notice that your total accruals for field lines, which we are talking about here, field line material, at the end of 1939 amounted to $3,864,000, as shown in line 47; isn't that so?

A. Yes, sir.

Q. Now you next have an item in line 48, "Add—Reserves Acquired"—$780,416?

A. Yes, sir.

Q. Now is that figure the reserves which appeared on the books of the predecessor utilities and nonutilities for property which the Hope Company purchased?

A. Not in every instance.

Q. Well, generally what is it?

A. Well, in the case of the Clarksburg Light & Heat, it is a reserve. In some of the other companies it may be a

3682 reserve that appeared on their books. In other instances, the company set up this reserve as if recorded the property, at the time it recorded the property on its own books, because they didn't have the other companies' books.

Q. Well, from which predecessor companies or predecessor utilities or nonutilities did most of these reserves acquired come from?

A. A very large amount came from the Mountain State Power Company.

Q. The Mountain State Gas Company, isn't it?

A. Yes.

TRIAL EXAMINER. When you say "It came from" there, do you mean it was actually on the books of the predecessor company, and then entered on the books of the company?

The WITNESS. I would have to check another work paper I have—analysis of acquisition. This merely is a break-down of the reserves acquired, and it doesn't show exactly whether or not it was entered on the predecessor company's books.

TRIAL EXAMINER. The records there simply show that the amount was set up on the books of the Hope Company when the property was acquired?

The WITNESS. Yes, sir.

By Mr. MILDE:

Q. You were saying that a large part of these reserves acquired came from the Mountain State Gas Company?

3683 A. Purchase.

Q. And another large part came, did it not, from the Clarksburg Light & Heat Company?

A. Yes; also a large part came from the Carter Oil Company.

Q. That was in the early days?

A. 1926.

Q. Well now, responding more directly to the Examiner's question, Mr. Dunn, isn't the situation generally that on these large purchases the Hope Company put on its books whatever the predecessor companies had on their books, and then put in its depreciation reserve whatever reserve the predecessor companies had set up; isn't that generally the situation?

A. Yes. I have a general discussion of that situation on page 4 of my direct testimony.

Q. And that is the reason that you called this line 48, as shown on this schedule, and similar lines on your other schedules, as "Reserves Acquired"; isn't that so?

A. That is not the sole reason, of course. The important point there is that these must be stated on the basis of the actual cost to the Hope Natural Gas Company, and the difference between reserves and original cost and purchase price must be correctly accounted for—and this is one step in that accounting.

Q. Well, what you have ultimately reflected in your Plant Accounts, as you adjusted them to determine the adjusted

3684 book cost as of December 31, 1938, is the purchase price to

Hope of the Mountain State Gas Company property and the Clarksburg property; isn't that so?

A. Well, I just said that it is reflected in the plant accounts, and the reserve accounts. They both must be taken into consideration when you consider purchase price.

Q. Was your treatment the same, Mr. Dunn, for properties purchased from nonutilities?

A. I might explain that by saying that Hope's treatment was approximately the same. Their practice at all times was to record original cost as nearly as could be determined. The difference between original cost and purchase price, if any, was recorded in the reserve for depreciation.

Q. Mr. Dunn, I don't want to quarrel with you about the practice of the company, but are you attempting to testify now that in connection with its bookkeeping over the years, the Hope Company ever attempted to find out the actual original cost of properties which it purchased?

A. Oh, I certainly am. That is very clearly indicated by the fact that they have got these books from the other companies, have made investigations of them, went out and took field inventories. I think they determined it in every instance that I have been able to check.

* * *

3687 Q. Now Mr. Dunn, in connection with these reserves that were acquired by the Hope Company from the Clarksburg Light & Heat Company, and the Mountain State Gas Company, and the Carter Oil Company, were or were not those reserves set up by these predecessor companies at an annual rate of 2.22 percent as applied to Field Line Material?

A. I doubt that they would be, I don't know of course in every instance.

Q. Did you make any investigation as to the annual rate at which these predecessor companies set up their depreciation reserves?

A. I have already testified that I did not. You asked me that very same question once before.

3688 Q. On another exhibit.

A. No; on this exhibit.

Q. You know, do you not, Mr. Dunn, that the Clarksburg Light & Heat Company, and the Mountain State Gas Company were affiliated companies of the Hope Company at the time of purchase?

A. I believe that they were, I don't recall exactly the extent of the affiliation.

Q. And wouldn't you expect that their annual depreciation provisions would be on a very conservative accounting basis, just as in the case of the Hope Company?

Mr. REEDER. I object to the form of the question. It seems to me this Commission is not interested in any speculations, and I don't think it is proper for counsel to ask the witness to speculate.

TRIAL EXAMINER. Read the question, please.

(The question was read.)

TRIAL EXAMINER. It seems to me that you have two questions.

Mr. MILDE. I will withdraw it, Mr. Examiner, because of course actually Mr. Dunn ought to know this.

By Mr. MILDE:

Q. Isn't it a fact, Mr. Dunn, that the books of the Clarksburg Light & Heat Company were available to you?

A. Yes.

Q. And that if you had examined the depreciation vouchers
3689 of that company, you could have determined the precise rates at which that company had set up its depreciation reserves in the past?

A. Yes, sir.

Q. And isn't that same situation true of the Mountain State Gas Company?

A. I believe those records were available.

Q. And the fact is that you didn't look at them?

A. Oh, yes; we looked at them——

Q. (Interposing.) So far as ascertaining at what rates the depreciation reserves of these predecessor companies were set up?

A. I personally did not, because I was not interested in those rates, but some of the members of the staff may have looked at them.

Q. Well, did they advise you what they were?

A. Not that I recall.

Q. Do you know of any memorandum in Commission's files that states what they were?

A. No.

Q. Well, isn't it a fact, Mr. Dunn, that by adding what you call these "Reserves Acquired" in line 48, which we have talked about, you have just assumed that this acquired reserve at the date of purchase accurately represented the accrued depreciation in that property as of the date of purchase?

3690 A. I don't know that I have assumed it—it did.

Q. Oh, you think it did?

A. Yes.

Q. And did you know, when you used these figures in schedule No. 3 and elsewhere, what the relationship of the accrued reserves, as shown on the Clarksburg Light & Heat Company's books, was to its gross book cost of its plant at the time of purchase by the Hope Company?

A. Yes; I knew the relationship of reserve to the gross book cost and purchase price.

Q. And what was that relationship for the Clarksburg Light & Heat Company properties?

A. I don't have those acquisition work sheets down here.

Q. Well, will you have them after lunch?

A. Yes.

Q. Let me ask you to check on those sheets, Mr. Dunn, as to whether it isn't a fact that the depreciation reserve of the Clarksburg Light & Heat Company was about 43.8 per cent of the book cost of its properties at the time it was purchased by the Hope Company; and whether, in the case of the Mountain State Gas Company, the Mountain State Gas Company's bookkeeping reserve wasn't 52 per cent of the gross book cost of its properties at the time Hope purchased it?

* * *

3692 By Mr. MILLER:

Q. Mr. Dunn, were you able to check during the recess the percentages I gave you just before adjournment?

A. I checked the percentages. I do not believe I found them exactly the same as yours. I will give them to you, though.

Q. What did you find?

A. On Clarksburg Light & Heat the reserve was 39.8 per cent of the plant account and the net book cost was 60.2 per cent of the plant account.

Q. That was at the time of Hope's purchase of Clarksburg Light & Heat?

A. That is correct.

Q. That was in 1929, was it?

A. Correct. On Mountain State the reserve was 48.9 per cent of the plant account and the purchase price or net book cost was 51.07 per cent of the plant accounts.

Q. Are those dollars shown in your work sheet, that
3693 is the figures from which you derive the percentages?

A. Yes.

Q. Was that Mountain State Gas Company purchase made in 1910?

A. Yes.

Q. Could you give us the dollars that you used for your computation for Clarksburg Light & Heat?

A. Yes. Gross book cost $2,169,692.69; reserves, $863,942.09. On Mountain State plant accounts, $1,299,418.21; reserves, $65,755.

Q. Did you check also the Carter purchase or not?

A. I did not check the Carter purchase.

Q. You did not make any investigation, did you, Mr. Dunn, as to whether the relationship between the reserves and the gross book cost of the Clarksburg Light & Heat Company and the Mountain State Gas Company corresponded in any way to the physical condition of the properties that were purchased by the Hope Company?

A. No; I did not.

Q. Or in any way measure the expired service life?

A. No. That would have required a service life study by the engineers, and I did not do that.

Q. And as far as you know, the engineers made no such examination or determination?

A. No.

3694 Q. Is it not also a fact, Mr. Dunn, that you did not determine what would have been a proper reserve for Clarksburg Light & Heat Company and the Mountain State Gas Company to have had at the time Hope purchased the properties on the depreciation rates that Mr. French supplied you?

A. No; I did not make such investigation.

Q. In other words, you did not redetermine the depreciation reserves or the accrued depreciation, or the actual existing depreciation, insofar as those properties were concerned at the time of purchase?

A. I would like to say that to Hope the actual existing depreciation stated on the cost basis was, in the case of Clarksburg, $863,942.09. Now, as far as Clarksburg is concerned, I did not restate their accrued.

Q. What do you mean by the statement that you hope the actual existing depreciation was so much?

Mr. SLAFF. He said "to Hope."

The WITNESS. As far as Hope's cost is concerned, that is what the actual existing depreciation is.

By Mr. MILDE:

Q. Just how did you arrive at that conclusion, Mr. Dunn?

A. Hope recorded an original cost of $2,233,252.76 as the original cost of the property, and——

* * *

3696 The WITNESS. The difference is $1,369,310.67, which they paid for this property, $1,369,300 even, making a difference of $10.67. Therefore the depreciation amount of $863,000 is the actual depreciation on a cost basis. It can not be otherwise. To do so would change the cost.

By Mr. MILDE:

Q. Mr. Dunn, will you now explain the difference between the figure of $2,169,000, which you gave me before, and the $2,233,000 which was the gross book cost of the Clarksburg properties?

A. Yes. That difference is largely some construction work in progress.

Q. I see. When you said that Hope recorded $2,233,000 as the original cost I judge that what you mean is that Hope recorded that amount of money which was the book cost to the Clarksburg Light & Heat Company in Hope's plant account, is that not so?

A. Yes. Those two figures combined make the original cost to Hope.

Q. And when you say that the difference between the purchase price and the gross book cost of the Clarksburg Light & Heat Company represents depreciation of Hope—is that

3697 what you said?

A. Yes.

Q. What you mean is, and all that you mean is that Hope paid $1,300,000 for property that the Clarksburg Light & Heat Company showed on its books as having a book cost of $2,233,000?

A. A net book cost of $1,369,310, exactly what they paid.

Q. Well, how can the difference between the cost to the predecessor utility of these properties and what Hope Company paid for them represent depreciation to the Hope Company?

A. Well, that is merely the difference between recording net purchase price and Hope's purchase price and reserve accounting. That is an option that is quite often made.

Q. That is all you meant by it? It is just that difference that you are talking about here?

A. I am talking about actual cost figures here all the way through.

Q. Well, so far as those properties which were purchased were concerned, you do not know, do you, Mr. Dunn, whether the difference between the gross book cost as shown on the Clarksburg Light & Heat Company books and what the Hope Company paid Clarksburg Light & Heat for those properties measured the correct reserve accrual for those properties or the actual existing depreciation, or the accrued depreciation as you
3698 used it in your exhibit, or the expired service life of those properties, do you?

A. I do not think that that point has any importance whatsoever in this transaction, of course not. Therefore I did not go back and investigate that, as I told you many times.

Q. I am not concerned with whether you thought it was important, Mr. Dunn. All I want to know is, you do not know and you made no investigation as to whether that difference between the book cost as shown on the Clarksburg Light & Heat Company books and what Hope paid, and the lesser amount that Hope paid the Clarksburg Light & Heat Company represented the items that I have just enumerated?

Mr. SLAFF. He answered that already in the answer to the last question, at the end of his answer. He said, "And therefore I made no investigation." The question has been answered. Why can not we go on to the next question? I object.

TRIAL EXAMINER. That is your answer, is it?

The WITNESS. That is right.

Mr. MILDE. I also asked him not only whether he made any investigation but whether he knew anything about it.

The WITNESS. I think this $863,000 is a very good measure of the accrued depreciation of the property.

By Mr. MILDE:

Q. You reached that conclusion without having made any investigation, I judge?

A. I reached that conclusion because that is what Hope
3699 paid for it in cash.

Q. And if Hope got a good bargain, would you say that because it got a good bargain the properties were more depreciated than if it had made a bad bargain?

A. Possibly. On a different set-up I do not know just what my answer would be.

Q. If the Hope Company had paid the Clarksburg Light & Heat Company, say, $2,000,000 instead of $1,300,000, on your method of handling this matter you would have then shown, would you not, a reserve acquired of $233,000 or thereabouts instead of the $863,000?

A. Not necessarily. Again I would see what the relationship was between the amount recorded on the books as original cost, the amount recorded in reserve for depreciation and the purchase price. I would want to study all factors involved before I made a decision on the transaction.

* * *

## 6752 TESTIMONY OF F. P. C. WITNESS DUNN ON COMPARISON OF DEPRECIATION RATES

Transcript pages 6752–6756

Direct examination by Mr. SPRINGER:

Q. Referring to Exhibit 142, Mr. Dunn, did you prepare this exhibit?

A. Yes.

Q. Are the sources of the figures and explanations of the table shown at the bottom of the sheet?

A. Yes; they are.

Q. What is the purpose of this exhibit?

A. To show that different depreciation rates, when applied properly and consistently, make little or no difference when compared in terms of cost to ratepayers.

In a comparison of the factors determining costs and rates, it is necessary to present the comparative figures on a cost basis. This statement applies particularly to depreciation expense and net property.

The difference in net property have been stated in terms of cost, as shown by column "H" on page 1, by applying an assumed 6-percent rate of return.

Q. The figures on page 1 do not compare those accounts where reserves and expenses are computed on a depletion
6753 basis, do they?

A. No; the depletion accounts cannot be compared by the same method used to compare the depreciation accounts because the depletion rates vary with production.

Q. What does the comparison as between Rhodes and French depreciation rate show when stated in terms of cost to ratepayers?

A. The difference is a saving to ratepayers of $24,621 by reason of using French rates.

Q. The figures shown on page 2 make a comparison of cost to ratepayers for return and depletion of operated leases, do they not?

A. Yes; these figures are taken from exhibits in the record. The comparison is confined to operated leases because this is the only account where per cent condition is applied to original cost and related expense is stated in terms of original cost.

Q. Mr. Rhodes' shows a higher original cost, does it not?

A. Yes; approximately $85,000 higher as determined by Witness Antonelli.

Q. Even so, his per cent condition method shows a lower net cost, does it not?

A. Yes; in the amount of $145,855.

Q. If you both started with the same figure, the
6754 difference would be more pronounced?

A. Yes.

Q. Do you recommend a larger expense than the company claims?

A. Yes; $15,423 higher, averaged for four years.

Q. What does the comparison of depletion expense and return on operated leaseholds show when stated in terms of cost to ratepayers?

A. The difference is an increased cost to ratepayers of $24,174, by reason of using the Federal Power Commission Examiner's accounting method.

Q. And that amount is an offset to the $24,000 you referred to on page 1 for depreciation, isn't it?

A. That is correct.

Q. Operated leaseholds amount to $1,600,000 of cost at December 31, 1938. Is there much other property which you have accounted for by depletion methods?

A. Yes; amounting to over $8,000,000, which property has not been compared in this exhibit.

Q. Do you recall a question, shown on page 3123 of the record, by Mr. Reeder, concerning the method used in depleting the capitalized well construction of some 722 wells, as to whether your reserve would be higher or lower if you had used the company method? What was your answer?

A. My answer is just that I remember the question
6755 and I answered that I believed the reserve would be higher using methods as proposed by the company. The company actually uses the accounting method and not a percent condition method on their books.

Q. Do you recall a similar question by Mr. Reeder concerning a higher or lower annual allowance for depletion?

A. Yes; and my answer was that the company method would have resulted in a lower annual allowance.

Q. That means that the company would have a lower rate base and less annual allowance?

A. Yes.

Q. Are you satisfied that your answers are correct?

A. Yes, because the same depletion methods have been applied to operated leaseholds. The net cost is lower and the annual expense is lower by reason of a percent condition method being applied to leaseholds, applying the percent condition method to well construction would produce similar results.

Mr. SPRINGER. I offer in evidence Exhibit No. 142.

TRIAL EXAMINER. Any objection?

Mr. MILDE. No objection.

TRIAL EXAMINER. Exhibit 142 is admitted into evidence.

(The document referred to was received in evidence as Exhibit No. 142.)

TRIAL EXAMINER. Is there any cross-examination?

6756 Mr. MILDE. Just one question.

Cross-examination by Mr. MILDE:

Q. Mr. Dunn, in this exhibit you have applied Mr. Rhodes' rates to your figures, have you not?

A. That is correct.

Q. That is, as shown in colnm "B", that is the adjusted book cost as set forth in other Commission exhibits?

A. Yes.

Q. And also you recognize, do you not, that column "H," if you used a 7 percent return for example, that that would about double the difference shown in column "J"?

A. Well, I don't think it would double it. I think I used 8 percent as a comparison, which I don't have noted here, just to see whether it would double it or not, and I don't think it increased it but very slightly.

Q. Our figure using 8 percent is $70,868 for the bottom column "J." Does that check with your figure?

A. Yes; I recall the amount.

Mr. MILDE. That is all.

* * *

6394 **TESTIMONY OF F. P. C. WITNESS BLEASE ON COMPARISON OF METHODS AND RESULTS FOR CREDIT TO HOPE FOR GASOLINE AND BUTANE EXTRACTED BY AFFILIATE**

Transcript Pages 6394–6405

Mr. SPRINGER. May I have marked for identification as Exhibit No. 127, this tabulation entitled "Hope Natural Gas Company—Comparison of Methods and Results of Commission Staff's Recommendation and Company's Witnesses' Recommendations for Proper Credit on Account of Gasoline and Butane Extraction"?

TRIAL EXAMINER. It may be so marked.

(The tabulation referred to was marked as Exhibit No. 127 for identification.)

Whereupon,

ERNEST B. BLEASE, a witness appearing on behalf of the Commission, having previously been duly sworn, was examined and testified as follows:

Direct examination by Mr. SPRINGER:

Q. Mr. Blease, referring to the exhibit marked for identification as 127, will you state the purpose of that exhibit which you prepared?

A. I prepared this exhibit from exhibits that have already been admitted in evidence in this hearing, for the purpose of correlating and showing in one place the effect of the exhibit on gasoline that I prepared, and also a comparison of that
6395 effect to the credit that Mr. Rhodes recommends for gasoline extraction by Hope Construction and Refining Company.

Mr. SPRINGER. I offer in evidence Exhibit 127.

Mr. MILDE. No objection except that I would like to ask Mr. Blease a question or two on cross-examination.

TRIAL EXAMINER. Does that complete the direct testimony?

Mr. SPRINGER. Yes, sir.

TRIAL EXAMINER. You may cross-examine.

Mr. SPRINGER. The exhibit was designed to be self-explanatory, showing sources of information, but if you have some additional questions, Mr. Examiner, Mr. Blease will be glad to answer them.

TRIAL EXAMINER. If it is self-explanatory, I don't have any. I haven't had a chance to look it over to see whether it is or not.

Mr. SPRINGER. I know you haven't, and I thought perhaps you would like to have more of an explanation.

Mr. MILDE. Perhaps I can ask a few questions on cross-examination that will help to explain it.

TRIAL EXAMINER. I assume that by referring to these other exhibits, this exhibit will be understood?

The WITNESS. The figures shown on this exhibit were taken from other exhibits and the reference to the exhibit and page number is shown on this exhibit.

* * *

6396 Cross-examination by Mr. MILDE:

Q. On this exhibit 127, as I understand it, the top group of figures under the column headed "Computed Credit to Hope Natural Gas Company" are a summarization of your figures and conclusions in Exhibits 63 and 78, isn't that so?

A. That is correct.

Q. And you show, for example, on the third line, that the average net investment, as you determined it for all of the Hope Construction and Refining gasoline and butane plants was $681,000 in round figures in 1937; and $482,000 in round figures in 1940?

A. That is correct, with the exception of the fact that this only represents the West Virginia plants dealing in Hope Natural Gas Company gas.

Q. That is right.

And you have now excluded the net investment as you determined it of the Kennedy plant as shown on the next line in both 1939 and 1940?

A. That is correct.

Q. And that gives you a balance of net investment to which you have added working capital of $80,000 to give a sum total on which you apply 6 percent return?

A. That is correct.

6397 Q. And is that 6 percent return your determination of what is a proper rate of return for gasoline plants, or is that merely a figure assumed for the purpose of this calculation?

A. It is a figure assumed for the purpose of this calculation.

Q. Then you take the earnings as you adjust them by your revised depreciation rate, and take out the Kennedy plant earnings, in 1939 and 1940, to get revised net earnings of the company for these plants which you have described?

A. That is, the revised earnings over 6 percent on the net investment.

Q. Well, that is the figure you show opposite the side heading "Excess of Above Earnings Over 6 Percent of Net Investment"?

A. That is correct.

Q. Now, in the balance of the figures you give some information as to how matters were recorded on the books, and what Mr. Rhodes' charges are, or his adjustments?

A. Mr. Rhodes' credit adjustments, you might say.

Q. Let me ask you, Mr. Blease, if the royalty recommended by Mr. Rhodes is not shown opposite the side heading, "Total Credit Recommended by Rhodes," a few lines up from the bottom?

A. That is correct.

Q. And that is $215,000 in 1937, and $167,000, in round
6398 figures, in 1940, with other amounts for the other years?

A. That is correct.

Q. Now, you subtract that $215,000 from what figure in order to show your next line, "Difference (Commission Staff over Rhodes)"?

6399 A. I subtract that $215,000 from $510,000, which is the 7th figure above the bottom. It is in connection with the side heading, "Total Credit Recommended by Commission Examiners."

Q. In other words, for the year 1937, the sum total of the examiners' recommendations is that the Hope Company be deemed to have received $510,000 in connection with this gasoline extraction process?

A. That is correct.

Q. And Mr. Rhodes said they should have received $215,000?

A. That is correct.

Q. And the difference between the two figures, then, is your $294,000?

A. That is correct.

Q. Let me ask you if that $510,000, which the staff recommends, isn't practically 70 percent of the plant investment as you determined it for 1937?

A. That is correct.

Q. Now I am slightly puzzled by this next line of yours, Mr. Blease, "Vent Gas Returned Not Adjusted by Rhodes." What is the meaning of that line?

A. Well, in computing the difference between us, that line is shown to take up the greater portion had Rhodes treated the vent gas as a property of Hope Natural Gas Company, instead of treating it as he did——

6400 Q. (Interposing.) As the property of Hope Construction and Refining Company?

A. That is correct. Then our differences would have been those shown on the last line.

Q. And shouldn't you really, to make the last line of this exhibit not misleading, say "Net difference (Commission Staff over Rhodes if Rhodes had treated vent gas as the Commission's Staff has treated it)"?

A. In order to clarify that, let's say that it should read "Difference (Commission Staff over Rhodes had Rhodes considered the vent gas the property of the Hope Natural Gas Company)".

Q. As the Commission's staff has considered it?

A. I have considered it the property of the Hope Natural Gas Company, but under the method that I used, it would have made no difference, because that credit would have come into Hope Construction and Refining Company's books, and would have increased the amount of excess profits passed back to Hope by the same amount as the vent gas credit.

Q. I understand that, Mr. Blease. All I was trying to point out is that that phrase in parenthesis is not complete in that it is not really the "Commission Staff over Rhodes", but the Commission Staff over Rhodes as you have adjusted Rhodes in the preceding line?

A. That is correct. Perhaps it would be clearer to
6401 say that in the third line where I show "difference (Commission Staff over Rhodes)," to add "as recommended by both." Then this next adjustment or next line, showing the vent gas returned not adjusted by Rhodes, would become clear, I think.

Mr. MILDE. May I ask whether the Examiner understands that this last line means the difference if Mr. Rhodes' figures, as shown in the third line from the bottom, had been adjusted as Mr. Blease adjusts them in the second line from the bottom?

Is that a correct statement, Mr. Blease?

The WITNESS. Yes, it is correct, but I still don't think it clarifies it.

TRIAL EXAMINER. Well, the difference would be the same in either case, wouldn't it?

The WITNESS. As the exhibits are now in the record, the recommendations that we make are over the recommendations that Mr. Rhodes has made by the amount shown on the third line from the bottom.

Now I am merely stating that if Mr. Rhodes had adjusted for vent gas, the difference would have been that shown on the last line.

TRIAL EXAMINER. But Mr. Rhodes didn't adjust for vent gas?

The WITNESS. Mr. Rhodes did not.

TRIAL EXAMINER. And you did?

The WITNESS. I did adjust for vent gas, but whether I
6402 had adjusted for vent gas or not, using this method I would have come out to the same result. It was a debit and credit between two companies.

Mr. MILDE. Well, this is just one of those questions where, when you get an exhibit up in a hurry, it is a little difficult always to select quite the right title to express what you have done.

By Mr. MILDE:

Q. Well actually, as the figures appear in the two sets of exhibits, Mr. Blease, the difference between the Commission's staff and Mr. Rhodes' figures, as reflected in our exhibits, is shown in the third line from the bottom, right across the page, is it not?

A. It is.

Q. With the exception that for the years 1939 and 1940, as shown in the other Commission's exhibit, the Kennedy plant investment has not yet been taken out, and earnings?

A. For the years 1939 and 1940, the Kennedy plant has been taken out.

Q. In this exhibit?

A. Yes.

Q. But not in Mr. Dunn's exhibits and Mr. Lyon's exhibits, where they used your original figures?

A. That is correct. You will remember that there was a stipu-
lation decided on between counsel while I was on the stand
6403 before, that that was to come out, and in this exhibit I have taken that out.

Q. So that the figures that should be reflected in these other exhibits on final determination of what the Commission's staff shows are the figures you set out here for 1939 and 1940?

A. To be in accordance with the stipulation

Q. That is right.

Mr. MILDE. That is all.

Redirect examination by Mr. SPRINGER:

Q. Will you explain your answer to Mr. Milde concerning the consequences of your adjustment for vent gas in any one of the years by an example, when you say you would have received the same answer in any event?

A. As the books are kept presently, H. C. & R. charges Hope for the vent gas returned, and Hope charges H. C. & R. for boiler fuel furnished in the same amounts with a slight difference in one plant.

In my study I have based the revenue due Hope Construction and Refining to a cost study, and limited the return to a ratio of the net investment. I have selected 6 percent here.

6404 So that, that return would be constant if the value of the plant remains constant, and any increase in revenue would be—any increase in gross revenue—would be that much increase in net revenue, or excess credit. So that, had I not adjusted for vent gas, I would have had that much additional credit on H. C. & R.'s books to come out down here as excess earnings over 6 percent of net investment; and when you combine the earnings of H. C. & R. with the earnings of Hope, it makes a Wash transaction and makes no difference in the final answer of the amount of credit recommended by Commission's staff.

Q. In what line?

A. That is the 7th line from the bottom, side heading, "Total Credit recommended by Commission Examiners."

Recross-examination by Mr. MILDE:

Q. Mr. Blease, I think I was mistaken in asking you if the figures in the third line from the bottom were not the ones to be reflected. That is just the difference between you and Mr. Rhodes, and actually the final figures that you recommend are shown opposite the side heading, "Total Credit recommended by Commission Examiners"—isn't that so?

A. That is correct. I understood that you meant that the difference between the two exhibits was the third line from the bottom.

6405 Q. Well, that is the difference between us, but the figures that are to be reflected in the Commission examiners' exhibits as the amount of money Hope is to receive on account of

this gasoline extraction process conducted by the H. C. & R. Company are the $510,000 you show for 1937, ranging down, and up again, and then back to $313,000, as shown opposite the side heading I have indicated?

A. That is correct, and let me state further that for 1937 and 1938, they are the figures used, but for 1939 and 1940, they have been adjusted by the Kennedy plant here.

Q. That is right.

* * *

## TESTIMONY OF HOPE WITNESS COFFMAN ON INVESTORS' APPRAISAL OF COMPARATIVE RISKS OF CAPITAL IN THE NATURAL GAS BUSINESS

Transcript pages 5663–5725

5663 Direct examination by Mr. COCKLEY:

Q. Mr. Coffman, you have been sworn and you previously testified in this case, did you not?

A. I did; yes, sir.

Mr. COCKLEY. I ask to have marked for identification as Exhibit 27–A, a paper entitled, "Hope Natural Gas Company—Investors' Appraisal of Comparative Risks of Capital in the Natural Gas Business, 1940—(Supplement to Exhibit No. 27)."

TRIAL EXAMINER. It may be so marked.

(The document referred to was marked "Exhibit No. 27–A" for identification.)

By Mr. COCKLEY:

Q. I hand you the paper, Mr. Coffman, marked for identification No. 27–A, and ask you if you prepared that exhibit, and if it contains your direct testimony supplementing
5664 your Exhibit No. 27 previously introduced in this case?

A. Yes, sir; it does.

Q. And the tables included therein weer prepared by you from ordinary statistical sources and in your office?

A. Yes, sir; they were.

Mr. COCKLEY. Mr. Examiner, I think it is unnecessary to ask the witness any questions in explanation of this unless the Examiner has some.

You will see on page 1 of the written statement of Mr. Coffman, a table which contains a summation of the results that he found in 1940, and the averages for the four years from 1937 to 1940. You will recall that his original Exhibit 27 was a study of electric utility operating companies, water companies, manufactured and mixed gas companies, and natural gas companies for the 3-year period, and that the determination of the investors' appraisel of the risk in those companies for the 3-year period, and the average for the 3 years. This exhibit merely adds the

figures for 1940, and makes the average for the four years, and shows in general that while there have been slight changes, in general the same relation between the investors' appraisal of these various companies has been maintained right through the year 1940. I offer in evidence Exhibit 27–A.

Mr. SPRINGER. No objection.

TRIAL EXAMINER. Does the City of Cleveland have any
5665 objection?

Mr. REEDER. No objection.

TRIAL EXAMINER. West Virginia?

Mr. KOONTZ. No objection.

TRIAL EXAMINER. Exhibit No. 27–A is admitted in evidence.

(Exhibit No. 27–A was received in evidence.)

Mr. COCKLEY. You may cross-examine.

Cross-examination by Mr. SPRINGER:

Q. Will you please refer to page 2 of Exhibit 27–A? The first paragraph shows a statement by you that, "investors continued to appraise the risk of natural gas companies as a group at a rate considerably higher than for the other divisions of the utility industry studied."

Does that mean that all your exhibit shows for the particular companies selected for your study is that natural gas companies are considered a relatively greater risk than electric companies, and water, and so forth?

A. I would say that that statement means that in the study we made, in which, as you will recall, we tried to get and include in thiss tudy all the companies upon which we could find data which would indicate the investors' appraisal, that that particular risk shows a higher risk factor in the minds of the investors for the natural gas than does it show for the other divisions of the utility industry which I studied.

5666 Mr. SPRINGER. Will you read my question? I think you have answered the question, but I would like to have it read back to the witness.

TRIAL EXAMINER. Read the question.

(The question was read.)

Mr. COCKLEY. Do you mean by that question that that is all that the exhibit shows, and nothing else?

By Mr. SPRINGER:

Q. That is the purpose of the study, isn't it; a comparison study?

A. That is correct, Mr. Springer. All I wanted to make clear in my answer was that going back to the original study, as you will recall, I had gone over all of the various utility companies in these divisions that I have mentioned here, that is, the electric, water, and natural gas and mixed gas, that are reported upon in our services, and as I had explained in my original exhibit, certain of those were eliminated for lack of data which would not permit me to make such a study complete, with the result that I finally came down to the list of companies that was actually included in my first exhibit, and insofar as those companies represent the entire division of the various branches of the utility industry upon which I could get an investors' appraisal, I think it is as complete as I could make it. I don't know whether that still answers
5667 your question, but that is about the only way I can answer it, I believe.

Q. Then your exhibit shows, for the particular companies you studied in these classifications, that the investors' appraisal of risk shows a relatively higher risk for natural gas companies in your particular study than for electric companies in your particular study, and water companies?

A. Yes; I would say that, and qualify it with the statement that the companies given in the various divisions were all the companies in each division that I could find comparable data upon which to make the study.

Q. Now on that point did you take companies for your study, the ones which had bonds, preferred stocks and common stocks held by the public?

A. In each case I took the companies where the great bulk of the capital, whether it be bonds, preferred stock or common, was in securities which were held in the hands of the public as contrasted with some company that belonged to a system where I could not get market quotations on a large part of the capital structure. My study is based altogether upon securities that were in the hands of the public, where I could get fairly reliable market quotations.

Q. Are there any of your 13 natural gas companies in which not 100 percent of the common stock was held by the public?

A. Well, offhand I wouldn't want to say that 100 percent
5668 of the common stock in every case was held, but I would say that a large part of it was held, and that there were sufficient shares traded in the market to give a reliable market quotation.

Q. Now if a major portion of a gas company's securities were

in bonds, not held by the public, it wouldn't be included in your study?

A. That is, if a large portion of the securities were not held such that we could get a market quotation on it, we eliminated that.

Q. Now, if a major portion of a natural gas company's securities were represented by preferred stock and not held by the public, it wouldn't be included in your study?

A. I would like to qualify that to this extent, that generally speaking that is true with one qualification, that if, taking the total capitalization, there were a sufficient number of bonds, preferred stocks or common, held by the public so that a reliable quotation could be secured, I used it. However, if there were some notes, for example, or a very small issue of preferred, which was not in the hands of the public, but that in proportion to the total was very small, then I used it anyway, because taking the total capital I still had a fair representation of the amount of investors' money in the particular company.

Q. Now there were some natural gas companies' securities
5669 on which you were unable to secure market prices, weren't there?

A. There were some companies in which a small part of the capital structure there was not a market for, and in that case I made an estimate.

Q. What did you use?

A. In that case we used our experience and our knowledge of the securities, plus making a study of another security we believed to be comparable, which did have a price in the market so it would give us some guide upon which to go.

In most cases, as a matter of fact, they were situations where a stock, for instance, if it was a preferred, had a callable price, or some other guide, and the security was in such position in the capital structure and the earnings of the company were such that we thought we were in no error in taking the call price, if that is the figure we used.

Q. Will you list by name those natural gas companies for which you secured no market price for the securities, and used your estimate?

Mr. COCKLEY. You mean a market price of all the securities?

Mr. SPRINGER. Just what we are talking about.

The WITNESS. You are talking of 1940 figures, for the moment?

5670 By Mr. SPRINGER:

Q. Yes; just Exhibit 27-A.

A. Starting with my table marked Statement "D," page 6, the first company there is Duquesne Natural Gas.

In the case of Duquesne Natural Gas there were 124,556 shares outstanding of common stock; there were 2,410 shares of noncumulative convertible preferred $4 stock; 28,179 shares of $5 noncumulative preferred; and $724,500 of general refunding 7's of 1948.

Now, in each case there was a quotation available, so I made no assumption in the case of Duquesne.

Q. You had the market prices for that?

A. There was a market quotation; yes, sir.

Q. Well, will you just give me the names of the companies for which you didn't have market quotations?

A. El Paso Natural Gas is the first one.

In the case of El Paso Natural Gas for 1940 there were 601,594 shares of $3 par common stock outstanding. The indicated market value of that was $20,418,000. There was a quotation upon those securities.

There were 14,797 shares of 7 percent cumulative preferred, $100 par, which amounted to a million and a half, approximately, and there were quotations on that. Then there were also outstanding $6,000,000 of first mortgage 3½'s of 1953; $2,900,-
5671 000 of first mortgage 3's of 1955; $1,445,000 of 3 percent serial notes, due 1941 to 1945; and $1,000,000 of 2¾ percent serial notes due at the same time, outstanding. Now on the first mortgage 3½'s and 3's, and the serial notes, 3 percent and 2¾, there was no quotation.

Q. Those securities are all held by institutional investors, aren't they?

A. That is right; and in that case I took the par of the particular security, and the reason for that, so far as the notes were concerned, they were very near term maturity so that obviously they would approach par as they came to the date of their maturity; and the first mortgages, 3 and 3½'s, in studying other similar securities we felt safe in taking par.

However, for my purposes, of the total capitalization of $31,-900,000, almost $22,000,000 of the total was accounted for with actual quotations, and about 10½ million were on the mortgages and the serial notes upon which there was not a quotation and on which I took the par of the security. So that I had over two-

thirds of the capital structure accounted for with market quotations; and the others, upon which I made an estimate, I felt I had taken a conservative figure.

Q. My information is that the total securities outstanding for El Paso Natural Gas Company are a little over
5672 $18,000,000, and that about $7,000,000 of those are held by the public and about $11,000,000-plus are held by institutional investors.

A. Are you there including the common stock; is that everything?

Q. Yes; total outstanding securities.

A. That probably is right. I don't know your exact figure, but I would assume that that was about right, but for my study, so long as there were sufficient shares traded in on the market to give a bona fide quotation, I felt that was a reliable index of what the investors said, even though an institution might buy to hold, or for that matter might buy to trade in from time to time.

5673 Q. Then you had an elastic standard, it wasn't necessarily market quotations on the major portion of the outstanding securities of natural gas companies that you sought, it was some representative figure that you were after?

A. No; I wouldn't say that, Mr. Springer.

Q. Well, didn't you just say that of the outstanding securities of El Paso Natural Gas Company, of more than $18,000,000, $6,000,000 of that was held by the public which represented preferred and common stock, and that the remaining $11,000,000-plus, which was bonds and notes was held by institutions? Now, there the major portion of the outstanding securities is held by institutions, so you substituted something for the securities held by institutions where you couldn't secure market quotations?

A. Well, just going back for a minute, my figures don't quite line up with yours. In the first place the total indicated market value, according to the figures I have, I have given you for 1940 on El Paso was $33,300,000.

Q. We aren't talking about the same thing. I am talking about the same thing. I am talking about total outstanding securities, and you are talking about total indicated market value.

A. But my point is that to appraise the value as the
5674 investor sees it, of the total capitalization, you have to take some guide for each, and in the case of the great bulk of this item, which refers to common stock, I took market quotations and there are ample shares of common stock of El Paso

traded to give a good investors' appraisal of that particular portion of their capital structure. So whether or not the banks or insurance companies or some large individuals hold a certain portion of that, makes no difference as long as there was ample trading to get a quotation.

Q. Well, I just wanted to get your standards; that is one of your standards?

A. Yes; I took the market quotation, and whether an institution held these or not, I assume in practically every case—as a matter of fact, I know in practically each of these cases—there are one or more branches of the capital structure that are held by institutions, with respect to all these companies. We are advocating in many cases that they buy them. But I don't see that that has any bearing on my study so long as there were enough of the shares traded for me to get an idea of what you must pay if you go into the market to obtain certain additional shares or certain additional bonds.

Q. Well, your standards are limited by what is available
5675 in the market, and whether quotations are available or not, and then the additional estimates that you make to get a study of each gas company?

A. Where there is not a quotation; but in each case, as I say, that is on a small fraction of the total, in each of these cases.

Q. Will you continue with the list of companies where you couldn't get market quotations on the security?

Mr. COCKLEY. Do you mean on all the securities?

Mr. SPRINGER. No.

The WITNESS. If I may, I might comment on each of these. The Houston Natural Gas does not fall into your classification. There were quotations on everything. Interstate Natural Gas—also no problem.

Mr. COCKLEY. Do you mean by that that there were quotations on all classes of securities?

The WITNESS. Yes; I merely want to account for these companies as I go through.

By Mr. SPRINGER:

Q. For the Houston Natural Gas Company, the total outstanding securities were a little over $5,000,000, all held by the public, and that is the reason you secured the information?

A. Well, I want to make my point clear again. I am not saying in any one of these things that all the securities—where I say

5676 there is a market quotation—were held by the public, unless you include as the public, the banks, the insurance companies and every other investor. So far as I am concerned, any securities that were issued by any company, which are not in turn held by another company, which makes it a holding company arrangement, are securities in the hands of the public. It makes no difference to me whether they are insurance companies or not.

Q. I see. Your classification of institutional investors puts them in the public investor class?

A. Exactly.

Q. As distinguished from the affiliated investors?

A. Absolutely; yes, indeed, because to me as an investment advisor, they are just as much a part of the investing public as Tom, Dick, and Harry.

Q. Well, they must be fairly good securities, or you wouldn't advise an institution to buy them?

A. Well, that is true, they have to be in most cases to qualify as a legal investment, as you know. Interstate Natural Gas—no problem. We come to Lone Star Gas Corporation——

Mr. COCKLEY (interposing.) Mr. Coffman, for the record, when you say "no problem," that doesn't mean anything. Can't you explain more specifically?

The WITNESS. In the case of the Interstate Gas Company, we had quotations so that no estimate was made.

5677 In the case of Lone Star Gas Corporation, there were outstanding approximately 5,500,000 shares of no par common stock, upon which we had reliable market quotations, and that accounted for approximately $50,582,000 indicated market value. There were also outstanding 3½ debentures of 1953 to the amount of $20,000,000, upon which there were reliable quotations which gave an indicated market value of $21,500,000. There were also some notes, 2⅞ percent, due 1945, in the amount of $4,200,000. On those notes, they were all held by a single investor, and there was no question, so I took those at par $100.

By Mr. SPRINGER:

Q. By a single investor, do you mean an institutional investor?

A. In this particular case, I think it was. So that here, out of a total indicated market value of $76,287,000, I have accounted for about $72,000,000 by actual quotations. So that there, by far the greatest amount of the capital structure was accounted for by indicated market value, as based upon the investors' quotations in the market.

In the case of Memphis Natural Gas Company, there were 918,680 shares of common stock, $5 par value, outstanding, upon which there were market quotations, giving a total indicated market value of $4,023,000.

5678 There were also outstanding some 3 to 3½ percent promissory notes payable to banks serially in the amount of $1,700,000. Obviously, there was no quotation on those notes, and there was no reason to take them at other than par, which is the figure that I used, $100. So that, in that case, the great bulk of the indicated market value was based upon investors' quotations.

Q. And for Mountain Fuel Supply, their common stock is all held by the public?

A. In the case of Mountain Fuel Supply, all the stock is held, and I had quotations so I accounted for all that.

Q. Is that the same for National Fuel Gas Company?

A. Yes; the same is true there. In the case of Northern Oklahoma Gas Company, there were 189,300 shares of common stock, $1 par value, outstanding, upon which there were market quotations. There was also a first mortgage serial note which was held privately in the amount of $550,000, and upon that of course there was no quotation, and I took that at par; there was no reason for such securities to sell at anything in excess.

Mr. COCKLEY. What was the interest rate on that note?

The WITNESS. I believe that was 5 percent. Yes: 5 percent I am pretty sure.

5679 Now, in the case of the Northern Utilities Company, although there was common stock, 7 percent preferred and some first mortgage convertible bonds and income debentures outstanding, there were quotations on all branches, so I made no estimate there.

In the case of Oklahoma Natural Gas, there were 550,000 shares $15 par common stock outstanding, upon which there were quotations.

There were 58,000 shares of 5.50 convertible prior preferred no par upon which there were quotations, and 91,055 shares of 3 cumulative preferred, $50 par, upon which there were quotations.

There were $16,800,000 of first mortgage 3¼'s due in 1955 upon which there were quotations, but there were bank loans payable serially to 1946 of $5,500,000, upon which, of course, there were no quotations. So I took that at an estimated figure of $100 to complete it.

By Mr. SPRINGER:

Q. Was that 2¾ percent?

A. I don't recall what that percent was. Three and three-quarters percent was the rate on the bonds, the first-mortgage bonds, and I do not have the rate that is required upon the bank loans.

Mr. COCKLEY. Do you have it, Mr. Springer, in a circular or in some form?

5680 The WITNESS. I don't have that bank loan rate.

Mr. SPRINGER. That isn't important, go ahead.

Mr. COCKLEY. I was going to admit whatever figure your information shows, if you have it.

The WITNESS. Well, the 3¾ rate applied to the first mortgage bonds. I don't know what was the rate on the bank loans. In the case of the Pacific Lighting Corporation, there were 1,608,631 shares of common stock upon which there were quotations. There were 200,000 shares of $5 preferred upon which there were quotations. There was some 6 percent preferred $25 par of the Southern California Gas—897,564 shares—upon which there were quotations. But there was a long term serial bank loan from 1942 to 1949 of $6,000,000, upon which there was no quotation, and I took that at par $100.

By Mr. SPRINGER:

Q. Do you know if that was a 3-percent note?

A. I may have that figure. No; I don't have that figure, but 3 percent would sould very reasonable to me.

Mr. COCKLEY. Have you the figure there? You say it is 3 percent?

Mr. SPRINGER. That is my information.

Mr. COCKLEY. We will accept that.

5681 Mr. SPRINGER. Now, will you proceed?

Mr. COCKLEY. May I just ask a question to clarify this?

Mr. SPRINGER. Certainly.

Mr. COCKLEY. How much, out of the total of almost $166,000,000 indicated market value for Pacific Lighting Corporation have you not had market quotations for?

The WITNESS. It was merely on those bank loans of $6,000,000 which I took at par. Everything else was accounted for by a quotation.

By Mr. SPRINGER:

Q. You show investors' appraisal for that company of 5.66 in your exhibit?

A. Yes, sir. In the case of Southern Natural Gas Company, the common stock—691,970 shares outstanding—was accounted for by quotations. There were some Pipe Line 4½'s due in 1951, outstanding, in the amount of $11,300,000, approximately, upon which there were quotations.

There were some other first Pipe Line 4½'s due in 1952 in the amount of $528,000, and those I took at 105½ because they had a long enough maturity date, in so far as the earnings secured them, to make them run above par, in comparison with other similar securities.

There were some adjustment mortgage 6's due in 1960 in the amount of $5,700,000, and those were accounted for by
5682 quotations.

Q. How did you get the quotations on $3,000,000 of those held by affiliates?

A. What, the adjustments?

Q. Yes.

A. As I have explained before, I didn't, where they were held by affiliates, as long as a sufficient portion of any branch of the capital structure was traded in the market so that I could get a security price, I took that. I don't mean to infer that in each of these cases, the entire amount of stock that is issued and outstanding or all the bonds that are issued and outstanding were necessarily traded in the market. I am not saying that, I am merely saying that there was enough trading in each one of the securities upon which I took a price to give me a reliable market quotation.

Q. Is this the fact with regard to Southern Natural Gas Company, that the adjustment mortgage 6's due in 1960 of $5,700,000, almost $3,000,000 of that was owned by the public, a slight amount held by institutions, and then nearly $3,000,000 held by affiliates?

A. I would say that figure is approximately correct. I think I have some details on that.

Q. And the portion that was held by the affiliates, you didn't consider?

5683 A. Yes; I considered it, but on that portion held by the affiliates I took the market quotation that was available and merely multiplied the total amount of bonds outstanding by the market quotation to see what the indicated market valuation of the whole was.

Q. Did you include in your indicated market value of capital the $3,000,000 worth of those adjustment mortgage 6's, due 1960, in your figures?

A. In every one of these cases I have included the entire capital structure. If I had a market quotation to go on, then I applied that against the total amount of securities issued and outstanding, regardless of how they were held.

Q. I see. If you had a market quotation on a segment, you applied that to the total outstanding security of that class?

A. That is correct.

Mr. COCKLEY. That isn't a fair statement of his testimony. He said if he had a market value on a sufficient number of shares to show a real market, then he applied that market price to the whole. I don't want the record confused on that.

By Mr. SPRINGER:

Q. In your opinion, a sufficient amount of a given class of securities is what, 50 percent or more?

A. Well, what I did was not look at the given individual security, for instance such as a preferred stock or a bond
5684 or serial note; what I did was to take the total indicated market value of all the capitalization, and if I had 70 percent or better of that accounted for with quotations, I thought it was a very reliable indication of the investors' appraisal.

Q. Was your minimum 70 percent?

A. No; I had no minimum, because in each of these cases it runs higher than that, in every case. In other words, if the great bulk of the securities, and in most cases that relates to the common stock, had quotations to be reliable, you account for the great bulk of the total indicated market value in each one of these, so I thought it was a very reliable guide. As a matter of fact, I don't know of any other guide that could be used.

Q. When you speak of quotations, you are excluding the estimates that you made of the other type of securities not held by the public or institutional investors?

A. Let me make my point clear by a case we have already talked about. Take Pacific Lighting for example. Pacific Lighting had a total indicated market value in 1940 of $166,000,000, approximately. The only figure included in that entire total, based upon an estimate, is for the bank loans in the amount
5685 of $6,000,000, and I took those at par. So it is $6,000,000 estimated against $166,000,000 total, and that was my comparison all the way through.

Q. Now, can you make a similar comparison for El Paso Natural Gas where you had quotations only on about $7,000,000 out of $18,000,000 total outstanding securities?

A. No; I don't admit that, that statement is incorrect. The common stock outstanding was 601,594 shares, and there were market quotations on that which ranged from 41⅞ to 26, and I took an average of 33.94 as the average price for the year per share. That amount gave an indicated market value for the total common stock issued and outstanding of $20,400,000 as a beginning figure.

Then there were some 7 percent preferred in the amount of 14,797 shares outstanding, which gave another $1,570,000.

So that is about $22,000,000 accounted for out of a total indicated $33,000,000 of capital.

Now, the approximate $11,000,000 that I had estimates on were on those serial notes which couldn't possibly be worth more than par, so I accepted them at par; and the first mortgage bonds, which I also took at par. So that certainly if I made an error at all it was on the conservative side.

Q. So, on your formula where you have an estimate for $11,000,000 of bonds and notes, and the quotations you had on the preferred and common stock for that company, it gave you
5686 what you considered a larger portion of the indicated market value of capital with quotations than without; so you included it in your study on the same formula that you have the other companies?

5687 A. With one further qualification, that it is my conviction and contention that on the serial notes, which were taken at par, in a company like El Paso there can't be any possible question about those notes at par. So that although it is an estimated figure, it is as reliable as any market quotation you can get. The only thing is that when a person takes a note, they don't buy and sell it, usually; they hold it.

Q. Now you were stating the exceptions where you didn't have market quotations, and you had finished Oklahoma Natural Gas Company, had you not?

Mr. COCKLEY. He had finished all of them.

The WITNESS. I think I had come down to the last, which was Southern Natural.

TRIAL EXAMINER. You got down that far, anyway.

The WITNESS. Well, I think I was just up to Southern Natural.

In the case of Southern Natural—yes; I gave that, I have covered that, also.

Mr. COCKLEY. How much of that did you have to estimate out of a total appraisal of $31,000,000?

The WITNESS. Of a total indicated market value of $31,000,000, it was all accounted for except $1,000,000. There was $1,000,000 that I estimated, and $30,000,000 that was actually based
5688 upon quotations, and those estimates were again on the first pipe line 4½'s of 1952, and there I took the call of 105½; and on the collateral notes due serially from 1941 to 1942 of $600,000, I took those at par.

By Mr. SPRINGER:

Q. Will you state for clarification purposes your formula for securing indicated market value of capital, Mr. Coffman?

A. My procedure was to take, in each of these companies, the average of the various securities and long-term bank loans that were outstanding in 1940, including all of the common stock, the preferred stock, the various mortgage bonds, the various debentures and other bonds, any notes, and the bank loans.

In each case where I could find that there was a market quotation on the greater portion of the total outstanding capital structure, I used market quotations wherever they were available on each of the securities mentioned. Where there were no quotations, based upon my experience and knowledge of such securities I made an estimate, which in each case was par or greater for the security.

With respect to those securities, which for the most part were bank loans, and a few bonds, where I did make an estimate, they were accounting for a very small fraction of the total indicated market value except in the case of El Paso, where there was a larger percent.

5689 Q. And did I understand you to say that where a class of security was held partially by the public and partially by institutional investors, and the remainder by affiliates, that you took a market quotation and then an estimate for the remainder, to get a figure on the total of that outstanding class of securities?

A. No; I would like to make my point clear on that question.

TRIAL EXAMINER. You only required one quotation for the whole class of stock?

The WITNESS. Yes, sir; if there were enough shares or bonds traded so I had an indication of what the investors that were trading in this thing said it was worth, then it made no difference whether an insurance company or a bank had some of these securities and continued to hold them year in and year out.

By Mr. SPRINGER:

Q. Or an affiliate?

A. In the case of an affiliate, it made no difference, because if there were enough of the shares outstanding, not held by affiliates, to give me a quotation, then I said that that market quotation, times the total amount of that particular security issued and outstanding, gave me the indicated investors' appraisal.

Q. Now for the Southern Natural Gas Company, first
5690 mortgage sinking fund 4½ percent, due 1952, there was no market quotation, was there?

A. No; sir; that was $528,000, and I took that at the estimated figure of 105½, which is what that type of bond, which had a market quotation, was selling on a yield basis in the market at the time.

Q. Now for $2,907,000 of the approximately $6,000,000 of adjustment mortgage 6 percent, due 1960, held by affiliates, you had no market quotation on that, of course?

A. The adjustment mortgage 6's due in 1960—there was a market quotation, because they were not all held by affiliates. There was a market quotation of 102½ as a high; and 90 as a low, and the average was 96¼.

Q. Of course, there were $3,000,000 held by affiliates, and you translated your market quotation for the total sum of $5,771,000 of those adjustment mortgage 6's, due in 1960?

A. If I can say it again, if, let us say, the Chase National Bank holds some of these bonds, and they continue to hold them in their portfolio, and never trade, but I, and a group of other individuals, hold some of those securities and trade in them day in and day out, then I assume that Chase National Bank, if they wanted to sell theirs, would have to consider the same kind of quotation, if they came into the market, that I do going in day in and day out.

Q. And the total included $3,000,000 held by the
5691 affiliates?

A. Exactly.

TRIAL EXAMINER. You can't get a quotation on securities that aren't sold?

The WITNESS. No; but as long as there are securities traded, that is the only guide I have got to go on to know what you, as a holder who doesn't trade, will have to consider if you do want to trade.

By Mr. SPRINGER:

Q. For this particular period of time?

A. Yes.

Q. Now there were $600,000 of 4 percent notes, 1939–1942, held by institutional investors, and there was no market quotation on that so you made an estimate, I take it?

A. I took those at par; yes. That accounted for $600,000 out of $31,000,000.

Q. Now for the common stock of Southern Natural, approximately half of it was held by the public, and then slightly more than half held by affiliates. So you took the market quotation and applied it to the total $10,000 worth of common stock, did you not?

A. I took the quotation that was available on the shares traded, and applied it against the total amount of issued and outstanding capital, that is right.

Q. Now do you know what Moody's ratings are on the 5392 bonds that you included in your natural gas company list for your study here in Exhibit 27–A?

A. Well, I don't happen to know what Moody's are. I know what ours are.

Q. Do you mean that there is a wide variation in the trade between your ratings and Moody's?

A. Not a wide variation but from time to time there is. The chief difference, however, is that we use one kind of symbol and they use another. We talk in terms of A–1 plus, and they talk in terms of Aaa.

Q. Could you make a general statement that is comparable to this statement, that a majority of the natural gas companies that you have selected for your study, have bonds rated by Moody at A or lower?

Mr. COCKLEY. I object to that. I don't think a general statement of that kind means anything. Bond ratings are individual matters, obviously, and it just doesn't mean anything.

Mr. SPRINGER. Of course, it is a preliminary step before the meaning is revealed. It will dawn on you pretty soon.

TRIAL EXAMINER. The objection is overruled.

The WITNESS. Well, I will answer your statement this way, that so far as Standard and Poor's ratings are concerned, that many of these companies have bonds outstanding, and those bonds are rated A or in the B classification.

5393 By Mr. SPRINGER:

Q. Now the electric companies which you have selected for your study, the bonds which are outstanding for most of those

companies are Aa and Aaa bonds, are they not, on Moody's rating? What are they on yours?

Mr. COCKLEY. Let's have one question at a time, please.

The WITNESS. In the case of the Boston Edison, which was included, they had $53,000,000 of bonds outstanding, first mortgage series A, 3½'s, due 1965. Those were A-1 plus.

By Mr. SPRINGER:

Q. Is that the highest rating you give?

A. That is the highest rating we give.

Q. Is that true of all the rest of the electric companies you have listed in your study?

A. Well, they vary, they are not all in the A-1 plus class by quite a margin.

TRIAL EXAMINER. Are these Standard ratings?

The WITNESS. These are Standard and Poor's corporation ratings—that is my firm. I have already qualified or made the answer that on Moody's ratings I don't have them with me, and I don't know. So if you want to know about ratings, you will have to take my ratings.

By Mr. SPRINGER:

Q. Could we have this agreement, that the Aaa Moody 5694 rating is the same as your A-1 plus?

A. Generally so, we are not far apart.

Mr. COCKLEY. I submit that the witness ought not to be compelled to use a competitor's ratings.

TRIAL EXAMINER. I think he should be familiar with them.

The WITNESS. I am familiar with them on the basis that I know that our ratings don't vary greatly from theirs, but the symbols are different.

By Mr. SPRINGER:

Q. Is this a fair statement, that the electric companies which you have selected for your study, which have bonds outstanding, that those bonds have a much higher rating, either by your organization or Moody's, than the bonds of the natural gas companies which you have selected for your study?

Mr. COCKLEY. Well, I object to the question in that it applies to a particular selection of companies, and the witness has carefully explained from the beginning that he used all of the companies on which he had available data, and he made no selection, and I don't like to have that included in there. If he wants to say the companies that appear in here, it seems to me perfectly

proper, but if there is any emphasis placed on "which you selected," with the inference that he has picked companies——

Mr. SPRINGER (interposing). We have already developed the basis of his selection. Now he has 13 natural gas companies
5695 in his study, and 7 electric companies in his study, and he makes a comparison. I am just asking him to compare the bond ratings of that group by electric and gas.

Mr. COCKLEY. I have no objection to that.

The WITNESS. Generally speaking, the bond ratings on the electric operating utilities as a class would be higher than bond ratings in the natural gas industry, but obviously that indicates the difference between the two types of investors' appraisal. In one case you can actually sell an A–1 bond and get by with it, and in the other case you can't, or they would if they could.

By Mr. SPRINGER:

Q. Is it a fair statement that natural gas bonds are relatively short-lived bonds, say around 15 years?

A. Well, generally in the natural gas industry that tends to be true, because there you have a wasting asset, and obviously you couldn't issue a bond for a longer life than you thought the asset was going to last.

Q. Is it generally true that the electric bonds are issued for 25 or 30 years?

A. Usually many of the electric bonds are longer term maturities, but there again, there is a difference in the industry. In one case it is a wasting industry, and in the other it isn't.

5696 Q. On page 6 of your Exhibit 27–A you show in the last line a figure excluding Pacific Lighting Corporation. What was the purpose of excluding Pacific Lighting Corporation?

A. Well, as I pointed out in my first original exhibit, the Pacific Lighting Corporation was an unduly large company. From the standpoint of size and no other, it was not in line with any of the other companies——

Q. (Interposing.) Is size important?

* * *

The WITNESS. Well, I will answer your question of size in a minute. The nature of the territory that was served, the type of service rendered, and so on, were important, but the main thing was that in taking any group of companies for a comparison, where one item stands out so heavily in the total that it unduly weights the average, from a statistical standpoint, as I think we all know, it is unsound. So I showed it both ways, I showed

it with the inclusion and with the exclusion. Size generally has a bearing on the extent to which one would consider it. Otherwise, it is just one of the factors I look at; I don't give it any more weight than anything else, particularly.

* * *

5697 The WITNESS. Further, I don't think I can make any better direct answer than what I originally stated on page 16 of the original exhibit, wherein I made this comment also, I think, to the same kind of question. I say here:

"Included in the above group of natural gas companies is Pacific Lighting Corporation. This company, through subsidiaries, distributes natural gas to 272 cities and towns in Southern California, including Los Angeles. Its subsidiaries serve about half the population of the State. Market prices of the securities of these operating companies are not available. In the absence of these, this holding company was treated as a single operating company in the above group. As a result, its indicated market value is nearly 40 percent of that of the entire group of natural gas companies.

"This gives entirely too much weight in the above table to a purely distributing company. Pacific Lighting Corporation owns no gas-producing facilities. It does not run any of the risks of a producing and transporting company, as does the Hope Natural Gas Company. It purchases its gas from independent oil and gas producers operating in the immediate territory
5698 served by it, where the actual and potential reserves are the greatest in its history.

"For these reasons, the risks of capital employed in this company more nearly approximate those of strictly distributing companies serving manufactured or mixed gas. Comparison of the investors' evaluation of the risks of this company as compared with the risks in the manufactured and mixed gas companies set forth above is as follows." Then I went on to show the Pacific Lighting Corporation separately and then the manufactured and mixed companies as a group.

5699 Q. Did you know that Pacific Lighting Corporation's system was an integrated system of approximately three to four hundred miles extending from the center of California down to the southern portion of California?

A. I know it serves that general area.

Q. Do you know that it has 1,600 miles of main transmission line?

A. I know it has transmission lines, but it still has to buy all of its oil.

Q. Do you know whether it has 1,600 miles of transmission line?

A. If you want to get the exact figure, I will check it. [After a pause.] It has properties including 240 miles of field gathering lines, 1,600 miles of transmission line, 11,400 miles of distribution line, and 24 miles of leased line.

Q. Do you know that one of the companies in that group, the Industrial Fuel Supply Companay, purchases, compresses, and transports gas for its affiliates in that integrated system?

A. Well, according to my figures here, the Industrial Fuel Supply Companay operates as a nonutility company and provides gas either for compression, transmission, or sale of natural gas under special contract, and is not engaged in the
5700 business of supplying gas to the public.

Q. Could you get the complete information and check me on whether or not the Industrial Fuel Supply Company purchases, compresses, and transports gas for its affiliated companies in that integrated system, in addition to these special contracts that you mentioned?

A. I think I can find that out.

Mr. COCKLEY. I certainly object to asking the witness to go out and make an investigation and come back here and testify.

Mr. STRINGER. I just asked him to check me. I would be willing to show him the source of this at recess.

* * *

By Mr. STRINGER:

Q. Do you know that the integrated system of Pacific Lighting has 18 field compressor stations with a capacity of 50,000 horsepower?

A. Yes; I know that.

Q. Do you know they have 21 booster stations with a
5701 horsepower of 19,000?

A. Yes; I know that.

Q. Do you know that they have 37 low-pressure and 79 high-pressure gas storage holders with a total capacity of 120,000,000 cubic feet?

A. Approximately 120,000,000; yes, I know that.

Q. Do you kno wwhen the Pacific Lighting System was converted to all-natural gas?

* * *

A. I have it here. It was 1927.

Mr. COCKLEY. That is it was converted from manufactured gas to natural gas?

The WITNESS (reading). "Natural gas first introduced in the Los Angeles metropolitan area in 1913 was served by the
5702 subsidiaries mixed with manufactured gas until 1927, when straight natural-gas service was inaugurated throughout the system."

By Mr. SPRINGER:

Q. Now, Mr. Coffman, do you know that the Pacific Lighting system owns two gas-producing fields?

A. Do you include in there Southern California Gas Company's holdings?

Q. Well, in the integrated system it would be included; yes.

A. All that has is one dry well, if you mean to include that.

Q. Doesn't your information show that there are two gas-producing fields held by the Pacific Lighting system? Do you know that, as you have stated, they purchase most of their requirements from three areas, the San Joaquin Valley area, which is hundreds of miles from Los Angeles; they purchase their natural gas from the coastal area, which is also many miles from some of the distribution centers, and they purchase natural gas from a basin area near Los Angeles; do you know that?

A. Generally.

Q. Of course they have to use those 1,000 miles of main transmission line to get the gas to market?

A. That is correct.

5703 Mr. COCKLEY. Well, just a minute. Are you testifying or are you asking the witness what he knows about that?

Mr. SPRINGER. He said yes.

Mr. COCKLEY. Did you answer the question?

The WITNESS. Generally; that is correct.

By Mr. SPRINGER:

Q. Mr. Coffman, you omitted from your study, Exhibit 27-A, the Arkansas-Louisiana Gas Company which has total outstanding securities of $34,000,000, all held by institutions and affiliates, didn't you?

A. The Arkansas-Louisiana Gas Company was eliminated for two reasons; first, the common stock was all owned by the Arkansas Natural Gas Corporation, but for another important reason, which was that 70 percent of the holding company's revenue comes from oil operations, it doesn't come from the gas business at all.

Q. Now, do you know that the Arkansas-Louisiana Gas Company has first mortgage bonds, 1940–1944, which sold in 1939 to yield 2.75 percent?

A. No; I don't know that right now. I don't have those figures here.

Q. You omitted from your study the Atlantic Seaboard Corporation which has total outstanding securities of $14,000,000. I suppose because it is all owned by affiliates?

A. I guess I eliminated that for another reason. We
5704 don't carry it in our service. Apparently there is no investment interest in it at all.

Q. Do you mean that if you don't carry it in your service, there is no investment interest on it?

A. We carry all the corporations in our service upon which we have any demand, and we have probably as large a list of investors as anybody in the country. I mean that is our whole basis for selecting the companies in our service. If we have a demand from any of our clients or any outsider, we try to get the information.

Q. Of course, if all the outstanding securities are held by affiliates as in this case they naturally wouldn't be any investment interest.

A. There wouldn't be any demand for information, and we don't have it and probably couldn't get it if we tried.

Q. And that is just another limitation of your study: you don't have complete information?

A. I made that announcement in my original statement, that I took only the companies we covered.

* * *

Q. Now, Mr. Coffman, you omitted from your study
5705 Cabot, Inc., which has total outstanding securities of $4,000,000 held by institutions and affiliates; did you not?

A. Yes; that is not included in the study.

Q. Now, for Canadian River Gas Company, which you omitted, the total outstanding securities are $6,000,000, all held by affiliates?

A. Well, that is according to my recollection; yes. I don't have anything on that.

Q. Now, for the Carnegie Natural Gas Company, which you omitted, there is $300,000 worth of common stock held by affiliates?

A. Well, I don't have the information here on that company. I don't know, really.

Q. Well, it is not included in your study?

A. That is correct.

Q. And you omitted from your study the Chicago District Pipe Line Company with $2,600,000 of total outstanding securities held by affiliates?

A. That company is omitted—I don't know about your figures.

Q. And you omitted the Cincinnati Gas Transportation Company with $6,800,000 of total outstanding securities held by affiliates?

A. Well, that company is omitted. Again, I don't know the figures.

5706 Q. You omitted the Cities Service Gas Company, with total outstanding securities of $73,000,000, $33,000,000 of which are held by institutions and $10,000,000 by affiliates?

A. That company is omitted—I don't know the figures.

Q. And you omitted from your study the Colorado Interstate Gas Company with total outstanding securities of $13,200,000 approximately, $8,800,000 of which were held by institutions and $4,300,000 of which are held by affiliates?

A. That company is omitted—I don't know the figures.

Q. You omitted from your study Consolidated Gas Utilities Company, with total outstanding securities of $8,000,000?

Mr. COCKLEY. Where is that? Is that in New York? What Consolidated Gas Company are you referring to?

Mr. SPRINGER. That company is engaged in the production, transportation, and wholesale of gas in western and northern Oklahoma and central and southeastern Kansas.

The WITNESS. That company is omitted—I don't know the figures.

By Mr. SPRINGER:

Q. Do you know that almost $8,000,000 or a major portion of those securities are held by the public?

A. I don't know that at the moment.

Q. Your study omitted the East Ohio Gas Company

5707 which has $38,500,000 total securities outstanding, all held by affiliates, didn't it?

A. That is not included—I don't know the figures.

Q. And of course the Hope Natural Gas Company, with almost $28,000,000 total outstanding securities held by an affiliate wasn't included?

A. That is not included—I don't know the figures.

Q. The Kentucky-West Virginia Gas Company, with total outstanding securities of $9,600,000 held by affiliates, was omitted?

A. That is not included—I don't know the figures.

Q. And you omitted Manufacturers Light & Heat Company with total outstanding securities of $22,500,000, all held by affiliates?

A. That is not included—I don't know the figures.

Q. And your study omitted Michigan Gas Transmission Corporation, with total outstanding securities of $8,700,000, all held by affiliates?

A. That is not included—I don't know the figures.

Q. And your study omitted Mississippi River Fuel Corporation with $16,400,000 total securities outstanding, $9,800,000 of which are held by institutions and the remainder held by affiliates?

A. That company is not included—I don't know the figures.

5708 Q. Do you know that the Mississippi River Fuel Corporation has $2,200,000 of notes held by institutions with interest at 2.75?

A. I don't know that.

Q. Now, your study omitted Montana-Dakota Utilities Company with total outstanding securities of $28,399,000, $24,400,000 of which were held by the public and $3,900,000 held by institutions?

A. I omitted that because 25 percent or better of its business is electric, and I couldn't segregate its income.

Q. Now, your study omitted the Natural Gas Company of West Virginia, with total outstanding securities of $5,300,000 held by affiliates?

A. The company was omitted—I don't know the figures.

Q. And your study omitted the Natural Gas Pipe Line Company of America with total securities outstanding of $51,400,000 all owned by affiliates?

A. The company is not included—I don't know the figures.

Q. Your study omitted New York State Natural Gas Corporation with securities outstanding of $6,500,000, all owned by affiliates?

A. That company is not included—I don't know the figures.

5709 Q. Your study omitted Northern Natural Gas Company with securities outstanding of $41,200,000, $22,000,000 of which is held by institutions and more than $19,000,000 of which is held by affiliates?

A. That company is not included—I don't know the figures.

Q. Do you know that the first mortgage sinking fund 3¼'s due 1954 of Northern Natural Gas Company—$16,000,000 worth—held by institutions sold in 1939 to yield 3.25 percent?

5710 A. I remember something about that issue, but I don't know the specific figures.

Q. Do you know that the Northern Natural Gas Company has notes, 1940–1946, in the amount of $6,000,000 held by institutions with an interest rate of 2.125 percent?

A. I don't.

Mr. COCKLEY. I object to that. There is no point in all this interrogation about specific securities without any question as to what they are a lien upon, what proportion of the total assets of the company they represent, what the dates of maturities of many of them are, and it is wholly disassociated from the properties and the business upon which they are a lien.

Mr. SPRINGER. I just stated all of those dates of maturity.

TRIAL EXAMINER. I assume that the purpose of the questions is to test the knowledge of the witness. Certainly it won't be evidence of anything when the witness answers each time that he doesn't know what the figures are.

Mr. COCKLEY. Well, if the purpose of it is to test the knowledge of the witness about apparently a lot of companies which, under the very term of the question and the limitations that the witness had imposed upon him by the necessities of having a market, show that most of these companies were perfectly properly excluded by him just because he couldn't get a market on them, that is,

5711 all. Now when it comes down to these specific securities, this witness isn't testifying here as to the rate for short-term bond money or for short-term obligations of any kind, or for bond obligations of any kind, or anything else. He has done a statistical job, that is all. So when you go to inquire about these mortgages and short-term loans and the rate of interest on them, isolated from all other securities, it has no pertinency at all to his direct examination.

Mr. SPRINGER. We are glad to know it is purely a statistical job, but we are entitled to test the basis of the selection of information to get those statistics.

Mr. COCKLEY. I would be glad to have you state how you think the witness can take into consideration capital securities which have no market when he has undertaken to determine the investors' appraisal as shown by markets.

Mr. SPRINGER. Of course, I have revealed several companies here with securities in the hands of the public which would show a market value.

Mr. COCKLEY. I haven't heard one.

TRIAL EXAMINER. Objection overruled.

By Mr. SPRINGER:

Q. Now your study omits North Penn Gas Company, with total outstanding securities of $7,200,000, $3,400,000 of which are held by the public and $605,000 by institutions, and the re-
5712 mainder, in excess of $3,000,000, held by affiliates, is that right?

A. The North Penn Gas Company was not included in the study because all the common and half the preferred is owned by the Penn Gas & Electric Corporation, and the balance is owned by the Penn Gas & Electric Company, and there were not facts enough to make any conclusion at all.

Q. Now your study omits Ohio Fuel Gas Company, with total outstanding securities of $71,000,000, 41/2 million of which are held by institutions and the remainder by affiliates, is that right?

A. That company is excluded; I don't know about the figures.

Q. Your study excluded Panhandle Eastern Pipe Line Company, with total outstanding securities of $54,400,000, $13,500,000 of which are held by the public, $11,250,000 held by institutions, and the remainder by affiliates, is that right?

A. Panhandle Eastern was eliminated, that is just a straight pipe line company.

Q. What do you mean by a "straight pipe line company"?

A. It is just a transmisison and producing company, it is what we call a long distance pipe line company.

Q. Do you know whether or not any of the companies to which it sells gas are affiliated?

A. The company is partly owned by Columbia Gas &
5713 Electric, and the rest is owned by the Missouri-Kansas Pipe Line Company.

Mr. COCKLEY. Is there any market for all of its securities?

The WITNESS. There is a market for some of its securities, but not for the majority, they are held by the Columbia Gas & Electric and the Missouri-Kansas Pipe Line Company.

By Mr. SPRINGER:

Q. Do you know that Panhandle Eastern Pipe Line Company's first mortgage and first lien 3 percent, 1960, in the amount

of $12,000,000, owned by the public, sold in 1941 to yield 2.87 percent?

A. I don't recall what the figure was.

Q. Do you know that the public owns a million and a half dollars' worth of common stock of Panhandle Eastern Pipe Line Company?

A. A very small portion of the total is owned by the public.

Q. Do you know that institutional investors own $6,250,000 of first mortgage, first lien, 1946–1950, of Panhandle Eastern?

A. I don't know those figures.

Q. And that they were sold in 1941 to yield 1.65 percent?

A. I don't know those figures.

Q. Do you know that Panhandle Eastern Pipe Line Company notes, .75 to 1.50 percent, 1941, in the amount of $5,000,000,

5714 are held by institutions.

A. I don't know those figures.

Q. Your study omitted Peoples Natural Gas Company, with total securities outstanding of $16,950,000, all held by affiliates?

A. That company is not included; I don't know the figure.

Q. Your study omitted the Pittsburgh and West Virginia Gas Company, with total securities outstanding of $21,690,000, all held by affiliates?

A. That company is not included.

Q. And your study omitted South Penn Natural Gas Company, with $10,000,000 of total securities outstanding, all held by affiliates?

A. That company is not included; I don't know the figures.

Q. Your study omitted Texhoma Natural Gas Company, with total securities outstanding of $19,450,000, all held by affiliates?

A. That company was not included.

Q. And your study omitted United Fuel Gas Company, with total securities outstanding of $19335,000, 4½ million held by institutions and the remainder by affiliates?

A. That company was not included; I don't know the

5715 figures.

Q. Your study omitted United Gas Pipe Line Company, with total securities outstanding of $125,360,000, $5,230,000 of which were owned by the public, $858,000 by institutions, and the remainder by affiliates?

A. That company was not included; I don't know the figures.

Q. Your study omitted Virginia Gas Transmission Corporation, total securities outstanding of $4,000,000, all held by affiliates?

A. That company was not included; I don't know the figures.

Q. And your study omitted Warfield Natural Gas Company, with total securities outstanding of $10,300,000, all owned by affiliates?

A. That company is not included; I don't know the figures.

Q. And one more company was the West Texas Gas Company, with total outstanding securities of $5,000,000, $3,000,000 owned by institutions and $2,000,000 by affiliates?

A. That company was not included; I don't know the figures.

Q. Now, Mr. Coffman, of the total of $1,185,000,000 of outstanding securities of the major natural gas companies in the United States, would it be a fair approximation to say that 31 per-
5716 cent is held by the public, a little over 15 percent by institutions, and more than 53 percent by affiliated interests?

A. I wouldn't want to pin myself down to those percentages for the moment, but generally speaking there are a number of companies in the industry which are controlled, one way or another, through systems and therefore no part or any part of their securities is traded in the market and consequently has a market quotation.

Q. Well, can you state from your knowledge that you gained by making this study of selected companies, that more than half of the total outstanding securities of the natural gas companies in the United States are owned by affiliated interests?

A. Well, I would say that that is approximately correct.

Q. Then you don't know that 28 natural gas companies have all their securities owned by affiliated or institutional investors, and that 15 natural gas companies have their securities held by the public?

A. Well, generally, I know the names of the companies. As a matter of fact, I considered all of those in the original study and eliminated them wherever there were not market quotations to get information from.

Q. You didn't make a rate of return study for the Hope Natural Gas Company, did you?

A. No; what I did was to make a study which showed the
5717 investors' appraisal of the risks of capital, on the basis stated in the report filed.

Q. A purely statistical study?

A. Purely a statistical study.

Q. And you didn't make any comparative analyses of your 13 natural gas companies and the Hope Natural Gas Company on a

*consideration of operating revenues, earnings, dividends, gas supply, and gas markets, did you?*

A. No, sir.

Mr. SPRINGER. That is all.

TRIAL EXAMINER. I am not sure whether you made this matter of market quotations clear in your original testimony as to just how you determined those market quotations. I assume that the quotations were of actual sales of securities?

The WITNESS. Well, in most cases they are either New York Stock Exchange or New York Curb Exchange quotations, except in one or two instances where they were bid and asked prices for the entire year. What I did was, if it were a stock market quotation, to take the high and the low for the entire year, and then I took the average of that as being the best approximation of the even figure in between, and did the same on a bid and asked quotation.

TRIAL EXAMINER. All the securities you used, then, were listed either on the New York Stock Exchange or on the Curb, is that correct?

5718 The WITNESS. That would be correct for the great proportion of the indicated market value. For instance, if I had an indicated market value as in Pacific Lighting of around $166,000,000, the greater proportion of that was based upon the securities that were traded in a recognized exchange, and did have a high and low and closing price quotation.

TRIAL EXAMINER. Now on what was the smaller proportion based?

The WITNESS. That would be in those few instances, such as I told Mr. Springer, where there might have been a bank loan or a serial note upon which there was no trading whatsoever, and I took those at par as indicated, or if there was a call price higher than the par, I took that; otherwise, if I made an estimate where in one case I said 105.56, that was based on the position of the particular mortgage bond in the capital structure, and the maturity date, which I knew from the way securities of that type were selling, should have sold above par, and I would take that which approximated the actual yield basis——

TRIAL EXAMINER (interposing). You didn't take into consideration the activity of the stock in the market, did you?

The WITNESS. No; I didn't consider volume. What I wanted to be sure of was that there were actual shares traded or bonds traded day in and day out, which gave enough of markets. Now

whether it might have been, during the course of a year,
5719 ten million shares traded or five, I didn't consider that;
no, sir.

TRIAL EXAMINER. But there had to be sales from day to day and not just perhaps once a month?

The WITNESS. Yes, sir; there had to be sales from day to day; and I did not consider private sales where there was just one sale, such as to an institution or an insurance company, where it was going to be locked up and not in the market any more, such as those that Mr. Springer has been mentioning recently.

Mr. SPRINGER. You are not an investment counselor, are you?

The WITNESS. Standard and Poor's Corporation is investment counselor, and I am Vice President in charge of one division of that business.

By Mr. SPRINGER:

Q. You don't counsel on investments and advise clients to make certain investments?

A. I personally have in charge people that do; I don't do much of that directly myself.

Q. You don't?

A. No, sir.

TRIAL EXAMINER. Well, the number of shares of stock of a particular company being traded in would affect, to some extent, the market price of the stock, wouldn't it?

The WITNESS. I think I would have to answer your ques-
5720 tion this way, that if there were some unusual conditions in the market whereby volume increased considerably, let us say on the selling side, that the price might be driven down. The reverse would be true if the volume increased because there was a sudden run for the stock and people were buying and buying and the price might go up. But that, generally speaking, would be for a relatively short period of time, and I felt that in this study where I took 1937, 1938, and 1939, and now have included 1940, and took the year range, that any such wide fluctuations as you might get by an unusual situation were wiped out because you don't have a condition of that sort ranging over a long period of time—I mean for those odd fluctuations. So that, taking a year's range, you would get a fairly close approximation of what would be considered a reasonably normal figure for the amount of trading that is being done during that period.

TRIAL EXAMINER. Does the City of Cleveland have any questions?

Mr. Reeder. No questions, Mr. Examiner.

Trial Examiner. West Virginia?

Mr. Koontz. No questions.

Trial Examiner. Is there any redirect?

Redirect examination by Mr. Cockley:

Q. Mr. Coffman, does your exhibit show, in your opinion, the investors' appraisal of the risk of capital in the natural gas business for each of the years you have given?

5721 A. I think it does, because on any other companies that were mentioned, which were owned by affiliates or otherwise, there was no way to appraise that risk, to my knowledge.

Q. But my question now is whether or not, in your opinion, the figures shown by you each year for the natural gas business are the investors' appraisal of the risk in that business for that year?

A. I think it very definitely is.

Q. And is the same true for electric companies, year by year?

A. Yes, sir.

Q. And for the other utilities that you show?

A. Yes, sir.

Q. Now, Mr. Springer has called your attention to a number of companies. Has he called your attention to any company which you now think properly should have been included by you in this study?

A. No, sir.

Q. And which you omitted?

A. No, sir; I do not think any of the companies he has mentioned could have been included on the basis of the study as I made it. I stated clearly the basis of the companies that were considered, to begin with, and what the final selection

5722 came down to.

Q. And I am correct that the companies that you have included here include all of the natural gas companies upon which information of the kind that you were seeking was available?

A. To my knowledge it includes them all within the limits that I have stated in my two reports.

Q. Mr. Coffman, I don't know whether you completely cleared up the matter or not, but the question is still in my mind as to whether or not you in any case took a market price or a market quotation that represented completely inactive or a very inactive market, as for instance only an occasional sale, once a month, or something of that kind?

A. For the great bulk of the total indicated market value, there was ample trading on the securities. There are, on a few items, bid and asked prices, where there was trading, but I think we all know over-the-counter trading cannot be accurately checked as to the volume of shares, so that many times, although you have a reliable quotation, you don't know how many shares it involves.

Q. But that would be in case of the minor securities of a few of these companies?

A. In every case it was.

Q. And when you talk about quotations on the New York Stock Exchange, of course you refer to the reported price
5723 at which securities were actually sold?

A. Yes; I am taking the quotations as recorded in all the reputable papers, and by the New York Stock Exchange and Curb Exchange themselves as to the quotations.

Q. Now do you know of any producing field owned by the Pacific Lighting Corporation or its subsidiaries?

A. I don't know of any.

Q. Am I correct that Pacific Lighting Corporation, in addition to its distribution of natural gas, until a few years ago was also a very large distributor of electricity?

A. It was, yes, sir; until recently.

Q. And in what year, can you tell us, where the electric properties sold and its activities thereafter limited to the distribution of natural gas?

A. I believe it was 1937.

Mr. SPRINGER. That is right.

The WITNESS. January, 1937, the electric properties and business were sold to the city.

By Mr. COCKLEY:

Q. The City of Los Angeles?

A. Yes, sir.

Q. Am I correct, then, that the history of the company is that it served—the history of this holding company—that it and its subsidiaries served manufactured gas and electricity in Southern California territory up to 1913?

5724 A. That is correct.

Q. And from 1913 to 1927, it served mixed manufactured and natural gas, and electricity?

A. That is correct.

Q. And then from 1927 to 1937, January 1, it served straight natural gas and electricity?

A. Yes, sir.

Q. And it is only since 1937 that its sole business has been the distribution of natural gas?

A. That is correct.

Mr. SPRINGER. What do you mean by distribution? There are 1,600 miles of transmission lines in that integrated system. I object to the form of that question, and move that the question and answer be stricken.

TRIAL EXAMINER. Why?

Mr. SPRINGER. Well, it assumes facts not in evidence here. There is no evidence that it is purely a distribution system. He has admitted that they have 1,600 miles of transmission line.

Mr. COCKLEY. All right, if it will please Mr. Springer, I will say the transmission and distribution; will that make you happy?

Mr. SPRINGER. That is more accurate; that is, all I am seeking are the facts.

The WITNESS. That is correct.

5725 By Mr. COCKLEY:

Q. How many cities and communities did you tell us, Mr. Coffman, this company serves?

A. I think it is about 242.

Q. And do you know what the total population served is?

A. Yes——

Mr. SPRINGER (interposing). About 3½ million, isn't it?

The WITNESS. I have got the figure, the territory covers an area of about 38,500 square miles, and the population is about 3,495,000.

* * *

## TESTIMONY OF HOPE WITNESS BROWN ON HISTORICAL RATE OF RETURN

Transcript Pages 5881–5914

(Omitted in Brown's Testimony Printed in Supplement to Brief of Petitioner)

5881 Cross-examination by Mr. SPRINGER:

Q. Mr. Brown, referring to your testimony on the historical rate of return related to the four periods of the Hope Company's history, I believe it was your testimony that you thought a rate of return reasonably to be expected in the period 1898 to 1907 was 15 to 20 percent?

A. Yes.

Q. And you called that the development period?

A. The early development period, yes, and I considered the minimum return to be expected to attract capital, 15 to 20 percent. I might say that I understated that.

5882 Q. Now in your second period, 1908 to 1926, you reached the figure of 12 percent?

A. That is correct.

Q. And you called that the maturity period?

A. A certain stage of maturity and permanency.

Q. Now in the period 1927 to 1934, you reached a conclusion of 10 to 11 percent?

A. That is correct.

Q. And you called that the period of rising quality rating for natural gas companies and the long distance pipe line era?

A. Well, the rising quality rating of natural gas companies I put in the fourth period, but a big broad expansion of markets for natural gas companies fell in this period from 1927 to 1934, with a very large increase in interest on the part of the investing public and the investment banker.

Q. Now in your fourth period, 1935 to date, you reached the conclusion that an 8 percent rate of return might reasonably be expected?

A. Not less than 8 percent is correct.

Q. And you described that period as one of declining money rates?

A. Declining money rates and increased quality rating to the senior securities of natural gas companies.

Q. Now when you speak of the rate of return reasonably
5883 to be expected by the investor, do you relate that to the cash contribution that is made by the investor to the enterprise?

A. In general. It means the rate of return that is necessary in the best judgment to attract capital. Capital usually means cash, cash investment.

Q. Now at pages 5209 to 5210 of the transcript, Mr. Cockley stated the purpose of presenting your type of testimony on historical rate of return. I wonder whether you adopt his theme, which in essence is this: If you are going back to a rate base that is an accumulated history over a long period of years, then the right rate of return to go with that is the historical rate of return that should accompany original cost. Then he explains the rate of returns that they reasonably had a right to expect at that time when they invested their dollars in that property. Do you adopt that theme?

A. Yes; I adopt that theme, on this basis, that it seems a matter of fairness and justice on the part of any regulatory body, that if a rate of return on the investment is allowed for bonds or stock, and the investor makes his investment on that basis, that he is entitled to the end of his investment at that rate of return. He has got to take his chances on an increase in values or on a decrease in values, and on the improvidence on his part and the part of the managers of the property, he has to cast in his lot.
5884 If the investment increases in value, it seems to me that it would carry with it a contemporary rate of return, but if the investment remains stationary, the rate of return has got to carry through to the end, based on its original figure.

So I adopt Mr. Cockley's thesis in full, on the basis of fairness.
5885 If I invest a dollar in 1900 on the basis of 20 percent rate of return, then I expect to get 20 percent indefinitely, but on the other hand if my dollar advances, then I should expect to take my luck on any increase or decrease, presumably a decrease, in the rate of return.

Q. Now, when you say "rate of return on investment," do you originally relate that to the cash investment of the investor, and now when you speak of a change in the value of the investment, what do you mean?

A. Well, if I invest a dollar in farm land in 1900, with labor at 15 cents an hour, I should expect to get the same rate of return on that indefinitely in that farm land, at 15 cents an hour. If that farm land advances in value, based on 40 or 50 cents an hour labor, and a rising cost in land, then I should expect to take my chances on whatever the market rate of return was in the future. Answering your question specifically, your capital that is invested in any property years ago, naturally in the form of cash, would carry on with the same rate of return on that particular property in my mind or in the minds of any investors.

Q. The labor cost that you mentioned for operating a farm, related to a regulated utility, is an operating expense which is covered by the consumers' rate, is it not?

A. Yes.

Q. Now, on page 12 of your Exhibit 19, you say that
5886 it is your opinion that investors would not at the present time provide the capital for the Hope Natural Gas Company unless it was allowed and was earning at least 8 percent upon whatever is determined the fair value of its natural gas properties. Now, that seems to be at odds with the theme that you adopted on the rate of return to be expected upon the cash invested in the enterprise?

A. I don't see the discrepancy, Mr. Springer, but I might amplify it by saying that if you were to attract capital today to the Hope property, in my judgment it would cost you at least 8 percent over-all return on whatever is found to be the fair value of that property as of today.

Now, if you go back to some smaller value, naturally the 8 percent still holds.

I am not concerned particularly with what the rate base is going to be. I am testifying as to the rate of return on some rate base, and in my judgment it is not less than 8 percent.

Q. Whether or not the investor has contributed $50,000,000 or $100,000,000 to the enterprise, you would still recommend an eight percent rate of return?

A. That is correct.

Q. Now, on Exhibit 19, page 45, you state that more specifically the problem reduces itself to one of what rate
5887 of earnings the Hope Natural Gas Company would have to enjoy at the present time on its natural gas properties to enable it to replace the money invested in them.

How do you reconcile that with the theme adopted by Mr. Cockley, and by you?

A. Well, I am concerned entirely with a theoretical refinancing problem. As I testified the other day on direct rebuttal, I called attention to the Southern Natural Gas Company which was practically a complete refinancing job. The investor is interested in yield on his money; in security; in future prospects; and other things. He is given a prospectus of what the value of that property is.

Now, the property may be a large figure, it may be a small figure. He is interested in the items that I have just mentioned.

Now, in reconciling this with what Mr. Cockley said, if the investor thought that in the next 15 or 20 years this property—assuming a refinancing operation as of today—would not be allowed to advance with advancing costs of materials and labor and other things, he would be rather hesitant to invest his money in it.

In other words, the theory of "heads he loses, tails the other fellow wins" would scare the investor away in part at least.

The investor takes his chance on a decrease in investment,
5888 or an increase in investment; and by "investment" I mean the rate base.

Over a period of 100 years, I think it is well known that labor costs have gone up, many materials have gone up. If the investor feels that he is going to be shut off from any advance in the future on materials and labor costs, for future rate bases, I think he would be pretty well scared and stay out.

Q. Are you making any distinction between the speculative investment in industries that are not regulated and investment in the utility industry?

A. No; they are one and the same because capital will go into a speculative industry or into a public utility industry along the same general principles.

Q. And those principles are hope of gain and fear or loss, I take it?

A. Those are two of them. There is also security as regard first mortgage bonds, where there is no hope of gain. In other words, a man buying a first mortgage bond is not particularly interested in any gain, he wants security of principal and security of yield, income.

Q. Well, I consider yield a gain.

A. All right, I will accept that.

Q. Now, you relate your rate of return to be expected at the outset, to the capital invested by the investors, isn't that so?

5889 A. Yes.

Q. Now, that is distinguishable from the original cost or historical cost of the properties, is it not?

Mr. COCKLEY. I don't know what is distinguishable from what. Your question is not clear to me.

TRIAL EXAMINER. As I understand it, it is the amount of money invested as distinguishable from the original cost.

Mr. COCKLEY. How is there any difference between those two? I don't get it.

TRIAL EXAMINER. Do you understand the question, Mr. Brown?

The WITNESS. I think I understand the question, Mr. Examiner, but I am trying to think of an answer. Naturally a million dollars put into a property in 1900——

By Mr. SPRINGER:

Q. (Interposing.) Is this a cash investment?

A. $1,000,000 in cash put into a property in 1900 is worth more than $1,000,000 today, everything else being equal, assuming the company to have been in operation successfully during the last 40 years.

5890 If you allow the original cost of the property which was paid for with cash, and allow no increment due to rising costs of everything in the last 40 years, or nearly everything, I think you would have a tough time attracting capital to a utility today, or tomorrow, or for the next period of years.

Q. Do you make any distinction between investors' capital contributions and consumers' capital contributions in a utility enterprise?

A. I don't know of any consumers' capital contribution except the price of a stove.

Q. Well, do you know that excessive rates for the service rendered is considered a consumers' contribution?

A. It might be so. I don't approve of any excessive rates.

Q. Mr. Brown, your four periods for the Hope Company correspond generally with the Nation's economic history, do they not?

A. Yes; with that chart you have there. They correspond in general with the chart showing the economic history of the United States, but there are many more than four periods during the last 41 years.

Q. Then, it isn't a coincident that the four Hope periods you selected are parallel with the economic history of the nation?

5891 A. If I understand your question, there are many more than four periods in the last 43 years, 1898 to 1941. I grouped them in four periods due to certain characteristics which obtained in the entire natural-gas industry. Now, breaking those periods down into smaller periods, they would in general correspond to a chart of the economic history of the United States.

Q. Now, do you, as an investment banker, contend that an investor making a permanent investment in capital stock expects always to get the rate of return that happens to be current at the time he makes that investment?

A. Now, he has got to take his chances with decreased or increased dividends, but he makes the investment at the time with the hope and reasonable expectancy of that same rate of return, subject to the good and bad of the future.

Q. And do you know that a rate of return higher than the then prevailing average will in time attract more and more investors to a particular enterprise?

A. I think that is self evident.

Q. In other words, an attractive investment will secure additional investors until that rate that was higher than the prevailing average has raised the norm, more or less?

A. Well, when we come to float a bond issue, we compare all the other bond issues of that type that we can find—in fact, I have done it in the last 48 hours—and we take the

5892 average of the yields. If the average of those yields is 3.50 percent, then we set up our bond issue to yield 3.55 or 3.60, a very slight increase in the bond issue yield, to make it more attractive.

With the stocks, the principle obtains, with possibly a slightly wider margin of yield, but that difference is very small and doesn't affect my rate of return of 8 percent.

Mr. SPRINGER. May I have my question read? I think your answer is "yes" to my question.

(The question was read by the reporter.)

The WITNESS. I should have started my answer with "yes."

By Mr. SPRINGER:

Q. Your answer is "Yes"?

A. Yes; with that qualification.

Q. In other words, the investors are aware of the law of supply and demand as it is related to capital?

A. In general, they are; yes.

Q. And the investor, particularly as a common stockholder, knows that his return will not be the same each year but that he must suffer the ups and downs of the economic cycle?

A. Yes; that is true.

Q. Now, in Exhibit 19, page 8, you state that from an investor's viewpoint, the Hope Natural Gas Company does not have possibilities of growth, and therefore its securities would
5893 be less attractive than, for example, some other gas company, and on page 9 you say that fluctuations in revenues, plus the declining trend of production in West Virginia, and other considerations, indicate to the investor declining rather than increasing sales for the Hope Natural Gas Company over any considerable future period. Those are statements that appear in your exhibit, are they not?

A. That is correct.

Q. Now, did you testify that long-distance transmission lines have tended to stabilize the natural gas industry?

A. I did.

Q. Now, in view of the testimony by Mr. Tonkin that there has been a tremendous increase in the sales of the Hope Natural Gas Company, and that they propose to spend millions of dollars to augment the production and transmission system of the Hope Natural Gas Company to meet increased demands, and have even proposed a $25,000,000 pipeline extension to Louisiana, exceeding 800 miles, I believe, would you care to alter any of your statements in Exhibit 19?

Mr. Cockley. I object to that as not a complete statement of Mr. Tonkin's testimony at all. In the first place, the proposal is to become effective several years hence, and I don't think the question fairly includes all of Mr. Tonkin's testimony. If he
5894 wants to ask an expert witness, I think he should give him an opportunity to read Mr. Tonkin's testimony, or read it to him, and then ask him any questions he wants to about it. This isn't, as I understand it, cross-examination on his testimony of the other day, but rather it goes back to his original testimony at Clarksburg.

Mr. Spilnger. That isn't so at all, because he reiterated that he didn't choose to change his original——

Mr. COCKLEY (interposing). I am not objecting on that ground, but I think if you want to be fair to the witness you should ask him to read Mr. Tonkin's testimony, or else read it to him.

TRIAL EXAMINER. Or state a hypothetical question, if you are unable to state just exactly what Mr. Tonkin's testimony was. Of course, you are tying this in directly now to Mr. Tonkin's testimony.

Mr. SPRINGER. Well, if Mr. Brown doesn't know about the growth of the Hope Company's system, and the proposed new pipe line, I don't see how I can ask him any questions about it.

TRIAL EXAMINER. I don't know that that makes any particular difference. You can state a hypothetical question, including those elements, and ask him whether or not that would have any effect on his judgment. That is what you are trying to find out, isn't it?

Mr. SPRINGER. Yes; I didn't want to resort to hypotheses
5895 when there is evidence in the record of the growth and the proposed pipe line.

TRIAL EXAMINER. I don't know what else you can resort to, unless the witness already knows what the testimony is.

By Mr. SPRINGER:

Q. Do you know, Mr. Brown, that Mr. Tonkin testified that there was an increase in gas sales of from 50,000,000 M. c. f. in 1939 to an expected 70,000,000 M. c. f. in 1941?

Mr. COCKLEY. I don't think that is a correct statement. Have you the figures before you for 1939?

The WITNESS. I have, for 1939. I know in general about the plan for an extension at a cost of roughly $25,000,000 down to Louisiana. I don't know when that can be completed, or any of the details about it, but it seems to me it confirms my testimony of a year ago that the growth possibilities were extremely limited.

On page 8 of my direct testimony of a year ago, I show the declining tendency in West Virginia natural gas output, and I bring out that point very distinctly, that the growth possibilities would go a long way towards scaring off the investors in Hope Natural Gas property a year ago. I see nothing to change my opinion as of today.

The Hope Company, in M. c. f. of output reached its peak back in 1915, approximately duplicating it in 1916. Then there was a long decline until 1933; then there was some pick-up
5896 from 1933 until 1937; then a decline, and then a very marked

pick-up for the last year and a half, very largely due to the boom.

Now, an investor goes into a utility not with any view of a boom but with a long-range investment standpoint, and the building of this pipe line would indicate a ceiling on output in the neighborhood of 60 or 70 million M. c. f., which is much below what the output used to be, in fact it is below what it was prior to the first World War in 1912 or 1913.

That is what I was alluding to when I said that the growth possibilities were extremely limited and I put growth possibilities at the top in weighted value, as to the list of factors necessary to attract capital.

By Mr. SPRINGER:

Q. Do you mean by "growth possibilities," the possibility of additional natural gas in West Virginia for Hope?

A. West Virginia and over into Kentucky, without a very large outlay of money. Now, what they have got to do, as I understand it, is to put a very expensive pipe line down into Louisiana, and I remember testifying to this last year, that it meant either Louisiana or Texas in order to fill the demands.

Q. Do the statistics for the tremendous increase in the sales of natural gas reconcile with your statements in Exhibit 19?

5897 Mr. COCKLEY. I object to the question unless it is more specific, specifying what increases and what statement and——

TRIAL EXAMINER (interposing). What increases are you talking about, and over what period?

Mr. SPRINGER. Well, I believe you are aware of the 50 million M. c. f. sales in 1939?

The WITNESS. Yes.

By Mr. SPRINGER:

Q. And the increase which is predicted to reach 70 million M. c. f. this year?

A. Yes.

Q. Then, on page 9 of Exhibit 19, you say there is an indication of declining rather than increasing sales for Hope Natural Gas Company?

A. I state on page 9 that the declining trend of production in West Virginia plus the fact that for a few days in 1940 many industrial consumers dependent on Hope were curtailed to conserve the supply for domestic users, indicate to the investor a declining rather than increasing sales for the Hope Natural Gas Company over any considerable period.

Now, I say nothing about going out and buying a property, or extending a line 800 miles away. That is always in the range of possibility to any company, but at an additional cost of
5898 capital which will at the same time dilute the capital already invested.

Q. But, of course, Hope has experienced these increased sales without building a new pipe line to Louisiana?

A. True, and have reached a ceiling there at 70 million M. c. f.

Q. Do you predicate that that is the ceiling?

A. Well, I don't know whether that is the exact ceiling, but I think it is common sense to call it a ceiling when they are going out and spending $25,000,000 to get an additional supply of gas. It seems to me that it is self evident.

Q. Do you mean to imply that an investor, who invested his money in the first period of Hope's history, expected to earn a rate of return of 20 percent forever on that investment?

A. Yes; and I am understating it at 20, probably 25 percent. If you knew anything about the mining or oil business in those days, you made anywhere from 25 percent to 100 percent or else you didn't put any money into the ground.

Q. Now, you have related the Hope Natural Gas' early history to the oil business.

A. It has many similarities with the oil business, and it has today.

Q. Well, now, isn't one of the chief causes of regulation, the higher rate of return that was made possible by the high prices of monopoly in the early years?

5899 Mr. COCKLEY. I object to that, we are getting awfully far afield on speculations of that sort.

TRIAL EXAMINER. I don't know just what knowledge this witness would have of that.

Mr. SPRINGER. Well, he has spoken about the Standard Oil Company with its operations in oil and natural gas, and he has related the natural gas business to the oil business, and I think it logically follows that the history of the nation has recorded the development of regulation to control the high rate of return made possible by the high prices of monopoly in the early years.

TRIAL EXAMINER. You think this witness then should know what has caused the regulation?

Mr. SPRINGER. He really should if he is a student of the economic history of the United States.

TRIAL EXAMINER. Well, I will let the witness answer.

The WITNESS. Well, I am a firm believer in regulation of natural gas companies, and I am a firm believer in regulation of all public utilities. To that extent, natural gas companies differ from oil companies, and naturally any company that is subject to regulation perhaps has two differing factors involved as governing the attraction of capital; one, the regulation tends toward stability; and two, the regulation tends toward a restriction of
5900 profits. One is favorable, perhaps, and the other is less favorable.

By Mr. SPRINGER:

Q. Do you know that the natural gas industry was subject to regulation through the whole period?

A. I do.

Q. That you have testified about?

A. Yes.

Q. Now, wasn't the investment of the Standard Oil Company, of money in the Hope Natural Gas Company at a time when Standard Oil was, as you have testified, able to earn about 25 percent on its investment, an indication of the high profitableness of the natural gas business in West Virginia, perhaps to its monopolistic nature, rather than an indication of the cost of money for a natural-gas public utility?

Mr. COCKLEY. Well, that is a statement——

The WITNESS (interposing). No; I don't think so. The Standard Oil Company had properties all over the world. Of course, they were much smaller then than they are today, and to get anybody to go out into the hills of West Virginia and sink a gas well in 1898 called for a high cost of money, and there were mighty few individuals that were willing to do it; and outside of the two or three oil companies, I don't think it could have been done.

My point in bringing that Standard Oil figure of 25 percent in, was to get some idea of what the Board of Directors
5901 of the Standard Oil Company might be thinking in 1898 when they wanted to risk some money in the West Virginia hills, which was a young industry and a brand new enterprise in a young industry.

I can't think for a Board of Directors in 1898, but applying the same conditions of 1898 to 1941, I wouldn't sit on any Board of Directors and start to sink money out in the wilds of Australia for natural gas, with no market and only a half a knowledge of what I was going to find, for less than 25 percent.

By Mr. STRINGER:

Q. Do you mean that the people in Ohio weren't begging for natural gas in the early period of Hope's history?

A. They were, but they were getting it from little local fields around Ohio. They didn't introduce it into Cincinnati until many years after 1898.

Q. Do you know that the Hope Company was supplying natural gas to the East Ohio Company?

A. It started very early, yes; but the great majority of the output of the Hope Company for several years after 1898 was field sales to oil and gas companies in West Virginia for use under their boilers. In other words, it wasn't a public utility in any sense of the word.

Q. But immediately after that it entered into the public-utility phase of its history?

5902 A. No; I wouldn't say it did until about 1906 or 1907 when the percentage of sales of Hope turned from being mostly field sales to being sales to domestic and industrial consumers. When the percentage crossed the 50-percent line to industrial and commercial consumers, then it became essentially a public utility.

Q. Now, one of the inventives to invest in a new, untried enterprise is the prospect of a higher rate of profit, isn't it?

A. Yes.

Q. And this is probably true because there is no past history for enterprises to assure the investor of the degree of safety of his investment?

A. Yes.

Q. But as the industry becomes seasoned and proven, it is reasonable to expect the rate of profit to decline?

A. Yes; generally.

Q. Now, you have stated that one of the stabilizing influences in the natural-gas business has been the transmission of gas by means of long-distance pipe lines since 1926, I believe?

A. Well, since about 1926–1927; yes. I wouldn't use the word "stabilizing" exactly. That was what made the public interested in natural-gas securities on a national scale. It did stabilize

5903 it to a large extent, but it brought in new markets, great metropolitan areas.

Q. And of course that means that the cost of money is reduced?

A. That is correct.

Q. And this [illegible] of stabilization should tend to lessen the risk to the investors in a company like the Hope Natural Gas Company?

A. Yes.

Q. Now, on page 5225 of the transcript you testified that 1934 was the end of the normal money market. What do you mean by the words "normal money market"?

A. Well, that is a rough figure, 1934. We started to see a decline in money rates—any table of bond yields will show that—money came very easily around 1935, increased in easiness in 1936 and the following years, and we had an abnormally easy money market in the last five or six years, with yields of high grade bonds declining from 4½ to 5 percent down to 2¾ percent.

Q. In your opinion, then, low interest rates constitute abnormality?

A. Well, that is a large subject. My personal opinion is that 10 or 20 years from now, or less—I don't know—high grade bonds will work back towards a 4½ percent yield, but when that day comes no man knows, it always has in the past.

5904 Q. Do you think low rate of interest is an unusual thing?

A. It certainly is. The lowest interest rates in the history of the United States have been in effect in the last few months.

Q. What is your norm so that you can reach a description of this period as being abnormal?

A. I just gave it to you—high grade bonds, 4½ to 5 percent; the next type of quality bond, 5 to 5½ percent.

Q. And do you know of any period in the nation's history that was relatively close to that cost of money?

A. Yes; it appeared around 1900 when railroads could finance on a 3 percent basis, but it wasn't as low a rate level as it is today.

Q. Again we are speaking in relative terms?

A. Well, yes; what was the question?

(The question was read by the reporter.)

The WITNESS. For a few months it was relatively close, in 1900, it was relatively close to today.

By Mr. STRINGER:

Q. I believe you described the Hope Company at certain periods as essentially a mining company?

A. I did.

Q. And what is the basis of that description?

A. Well, the essence of a mine is something that is
5905 taken out of the ground, and you have only a partial knowledge of what is underground. Therefore, you have a very substantial factor of risk. The reserves can be measured only in part, and at best they are estimated, and at the same time you have a wasting asset; a wasting asset, in the eyes of an investor, is a very serious thing. It means you have got to look for more reserves all the time, either in the same territory or further afield, and I would say that Hope has many of the essentials of a copper mine of the better class, or an oil company of the better class. I don't rank them with these "cats and dogs." I put them on the same basis as the upper group of mining companies and oil companies.

Q. The risk you speak of related to wasting assets, a wasting asset industry, will be minimized for the Hope Company by the new pipe line to Louisiana, and then the proposed extension to Texas that Mr. Tonkin testified about?

A. Certainly the risk will be reduced by this pipe line, but at the same time there is an element there of probable decrease in earnings due to the increased cost of capital. You can't raise $25,000,000 and put it to work overnight. It will take some time before that is reflected in increased earnings.

Q. Are you informed that the Hope Company will go into the public market for this money?

A. I don't care whether they go into the public mar-
5906 ket or whether the Standard Oil Company advances the money, it is all one and the same. The capital is the same whether it is advanced by A or B.

Q. What if the Hope Company has sufficient funds of its own?

A. Well, it hasn't got sufficient funds of its own. It can borrow.

Q. Do you know how many millions it has invested in securities?

A. I do, or at least I looked at the December 31, 1940, balance sheet, recently, and it hasn't got $25,000,000 of cash and Governments.

Q. Would you say that they would have to earn an 8 percent rate of return on that $25,000,000 to attract investors?

A. Not at all. I would say they would have an 8 percent overall rate of return if they went into the public markets.

Q. Now, do you know that what you referred to as a wasting asset is covered by consumers' rates in annual depletion allowance?

A. Yes, I do.

Q. And do you know that the history of the natural gas industry has been that additional gas reserves have been discovered which have gradually increased the total amount of natural gas reserves recoverable in the United States in the last two decades?

5907 A. I do, a very large increase in the natural gas reserves throughout the United States, but you will find that that increase is almost entirely confined to the far west and the southwest.

Q. And Hope has a proposed pipe line to go to Louisiana now?

A. Yes.

Q. Where additional reserves are located. Now, do you know how much gas is purchased by the Hope Natural Gas Company to meet its requirements, just the proportionate amount?

A. Oh, two-thirds, roughly. I can give you the exact percentage. I have checked with the engineers, but I don't recall the exact figures.

Q. Now, the fact that Hope purchases two-thirds of its requirements, does that change your opinion that it is essentially a mining enterprise?

A. Not in the slightest. You asked me the same question in June of 1940, and my answer was substantially as follows; That the vendors or independent producers mined gas and sold it to Hope; and they had all the risks and uncertainties that go with the Hope Company's own wells. They are one and the same in the eyes of the public.

Q. I believe you stated that Hope was essentially a public utility since 1907?

5908 A. I wouldn't put it as definitely as 1907—since about 1906 or 1905.

Q. Well, the fact that Hope——

Mr. COCKLEY. You are not asking that in any legal sense, are you, Mr. Springer?

Mr. SPRINGER. Well, all my questions are legal questions.

Mr. COCKLEY. Well, if they are, then I move to strike out the whole cross-examination, but as I understood Mr. Brown's testimony it was because so large a part of Hope's sales were field sales prior to about 1906 or 1907, and he wasn't very specific about the date; that he didn't really consider it to be a public utility before that time, without trying to put that in a technical sense, and

you are not now trying to ask him whether legally and technically it was a utility subject to regulation, are you?

Mr. SPRINGER. Well, of course, Hope was rendering service to the public in this period you speak of since 1906, and was subject to regulation by West Virginia by an early period.

The WITNESS. Yes, it was rendering service to the public prior to 1906 in a small way. The public looks at things in a large way, and technically it was a public utility prior to 1906, but actually it was in the same category as an oil company.

By Mr. SPRINGER:

Q. You mean that if it purchases two-thirds of its
5909 requirements it isn't a merchandising company?

A. Well, the word "merchandising" covers a broad field. I don't call it a merchandising company. It mines gas from its own wells, and it buys gas from somebody else's wells. Now, they are one and the same type of wells—it has its gathering lines. If a well belonging to an independent operator gives out, then that gathering line becomes obsolete or has to be taken up and placed elsewhere.

Now, the same risks and uncertainties follow the independent operator as they do the Hope Company with reference to its own wells. It is a mining or producing company, and I don't make any distinction between those two types of wells, owned by Hope and owned by the other people.

Q. Is the basis of your opinion on these various unusual rates of return, the average investor's attitude toward the gas industry? You spoke of the general public, I believe, the small investor.

A. No; because the small investors were not in the natural-gas industry in the early days. The National Fuel Gas has a common stock issue which came about by a former merger. The Company was originally a trust, starting in 1882. In 1890, sometime, it developed into shares of stock which didn't have any market value until, I think, about 1921.

5910 There were no small investors in natural-gas companies, to amount to anything, prior to 1921, and even later.

Southern California Gas started a subsidiary, Pacific Lighting, which had both electric properties and gas properties. In fact, Southern California Gas started originally as a manufactured-gas company, and then a mixed-gas company, and it is only in recent years that it turned to natural gas. Its first bond issue was put out in 1917, and that was sold to the public, and that has

been the highest grade natural-gas company in the United States, and the only gas company that ever had an Aaa bond on it.

Q. Mr. Brown, is it a fact that more than half of the money invested in the natural-gas industry has been contributed by affiliated companies or institutional investors?

A. I think that is a fair statement.

Q. And you advise institutional investors, don't you?

A. I certainly do, and I have sold lots of natural-gas bonds to banks and to insurance companies.

Q. And institutional investors are relatively well-informed on any prospective investment?

A. They are well informed.

Q. So your small private investor test is probably a minimum test, isn't it?

Mr. COCKLEY. I object. He just stated he didn't use the small private investor test, if I understood his testimony.

5911 The WITNESS. It is just the same thing selling a bond to a country bank as it is to an individual.

By Mr. SPRINGER:

Q. Well, you seem to convey the impression that the small private investor has a psychology, a complex about the natural-gas industry which isn't supported by the facts of millions of dollars invested by institutional and well-informed affiliate investors in the natural-gas industry. I just wanted to clear that up.

A. Well, I don't think you have cleared it up. Your affiliates are totally distinct from institutional investors. The institutional investors, generally speaking, include banks and insurance companies, and the larger banks and the insurance companies are pretty careful investors, and they buy, in general, only the senior securities. I know of only one common stock of a natural-gas company which is owned by an institution, and that is Harvard College.

The common shares have got to be sold to the public, so you have got to take the little investor, as you call it, into account if you are going to have an over-all picture of the cost of capital.

Now the natural gas industry never would have been built up to its present size had it not been for the foresight and courage of the larger affiliates, notably Standard Oil and Cities Service and Columbia Gas & Electric, and Pacific

5912 Lighting.

Q. And they realized a handsome profit, rate of profit, on what you call their courage?

A. They did through the years.

Q. You didn't mean to imply that the Standard Oil Company was the original promoter of the Hope Natural Gas Company, did you?

A. Well, no; not technically. There was a small group of men who started it, but the Standard Oil came into the picture through one of its subsidiaries, at a very early date, I think it was 1900.

Q. About the beginning of your second period, wasn't it?

A. Oh, no; long before that. You will find the National Transit was the largest stockholder either in 1900 or 1901. I can look it up.

Q. Well, there is information in the record on that.

A. Well, I have the Government record, the historical record, the corporate history.

Q. When you speak of the wasting asset characteristic of the natural gas industry, and compare it with a mining enterprise, do you recognize the distinction that is related to this factor, for example, that in the natural gas industry, exploration and development costs are contributed by the consumers
5913 through the rates, and the markets for the natural gas are essentially protected markets?

A. Why, certainly, but take the Cleveland Railway Company, they have substantially a guaranteed 10-cent fare, but that doesn't make the 6-percent dividend certain. For a number of years they haven't paid dividends. You can't guarantee a return to the stockholder by having a consumer pay for the exploration.

Q. In a mining enterprise, the investor contributes the money for additional exploration and development, isn't that so?

A. Indirectly he does, because it has got to be charged into operating expenses before arriving at the net available for dividends.

Q. Mr. Brown, are you aware of the new drilling methods and the advances in the transmission methods which have revolutionized the natural gas industry in recent years, so that it might be said that investment yardsticks which were applicable in times past are not applicable today?

Mr. Cockley. I object to that. There is no evidence of it; it is the first time I have heard of any revolution here. It certainly isn't in this record.

Trial Examiner. I believe he was just asking him if he was aware of the revolution.

The WITNESS. Well, I went over the property of the Hope Company in December of 1939, and watched them drill a few wells by the then latest methods. I haven't heard of
5914 any particular advances since then in inventions. Assuming the methods of today to be better than they were in 1900, I wouldn't say that it would change my opinion in the slightest. There has been an advance in methods of manufacture, and everything else during the past 40 years. At the same time, there has been a change in cost of construction during that period, due to high labor cost and cost of materials. When we finance a company, my firm, we always have an engineer's report on the value of the property made, and that is the general attitude of the public in buying new securities. We put that report into our prospectus, and that is the normal thing to do.

By Mr. SPRINGER:

Q. Do you rely on the estimates of gas reserves as religiously as you rely on the appraisal of the property by your engineers?

A. Well, I think that the estimated gas reserves are for an indefinite period of years. I haven't assumed that it is any short number of years. No; I don't rely on that as accurately as I do on bricks and mortar that are above ground, and I don't think anyone else does.

Mr. SPRINGER. That is all.

U. S. GOVERNMENT PRINTING OFFICE: 1948

**RESPONDENTS' APPENDIX**

**Volume II**

**Exhibit Book With Explanatory Statements**

# In the United States Circuit Court of Appeals for the Fourth Circuit

OCTOBER TERM, 1942

No. 4979

HOPE NATURAL GAS COMPANY, PETITIONER

*v.*

FEDERAL POWER COMMISSION, CITY OF CLEVELAND, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, RESPONDENTS

**ON PETITION TO REVIEW ORDER OF FEDERAL POWER COMMISSION**

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23 **EXHIBIT NO. 81.—CORPORATE HISTORY, F. P. C. WITNESS NICHOLS**

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## WRITTEN STATEMENT

On June 14, 1938 the directors approved an amendment to the Employees' Thrift Plan.

On December 28, 1938 the directors approved the purchase from Standard Oil Company (New Jersey) of 19,999 shares of stock of Reserve Gas Company at a price of $1,810,000.

On February 21, 1939 H. C. Cooper resigned as President and Director and L. L. Tonkin was elected to fill these vacancies. H. R. Livingston was elected to fill a vacancy in the Board of Directors. The resignation of H. B. Schum as Assistant Treasurer was accepted and J. C. Cross was appointed to that office.

On July 10, 1939 the directors approved a further amendment to the Employees' Thrift Plan.

On July 11, 1939 the directors authorized an exchange of property between Hope Natural Gas Company, Hope Construction and Refining Company, Pittsburgh and West Virginia Gas Company, and Philadelphia Oil Company.

On September 5, 1939 the directors authorized and approved the cancellation of a large number of gas leaseholds, the list spread in the minutes occupying approximately 37 typed pages. An adjustment to rates of depreciation applied to certain classes of property was approved, effective January 1, 1938.

On December 8, 1939 the directors approved and adopted an Agreement of Consolidation or Merger dated December 8, 1939,
24 between Hope National Gas Company and Reserve Gas Company and a special meeting of stockholders was called on December 8, 1939 to act on the agreement. After several adjournments the approval of the Public Service Commission of West Virginia was received on December 29, 1939, and the merger was consummated.

At a meeting of the directors on March 6, 1940 it was stated that the principal place of business of the company should be changed from Pittsburgh, Pa., to Clarksburg, W. Va., and a special meeting of stockholders was called for March 18, 1940, at which

meeting the stockholders passed a resolution authorizing the necessary amendments to the certificate of incorporation and by-laws.

On March 15, 1940 the treasurer of the company was authorized to sell $4,000,000 principal amount of United States Treasury Bills and purchase a like face amount of other government securities upon the best terms obtainable with the funds realized from the sale.

On May 21, 1940 the treasurer was authorized to purchase $2,500,000 face amount of 2½% United States Treasury Bonds due December 15, 1945, at the best price obtainable.

On September 30, 1940 resolutions were adopted pertaining to employees who are called in the future for compulsory military training.

On November 7, 1940 additional company contributions to the Employee's Thrift Plan were authorized, each participating employee's account to be credited with $25.00 plus 15¢ for each dollar of such employee and company regular contributions made on his behalf.

On the same date, the directors authorized the cancellation of 235 leases, owing to the fact that it was no longer considered profitable to hold them.

On December 23, 1940 a dividend of $10 per share was declared out of earnings on the outstanding capital stock, payable forthwith.

On December 26, 1940 participation in the group life plans of Standard Oil Company (New Jersey) adopted by the Hope Company in 1931, 1934, and 1938, were terminated as of December 31, 1940, and a new plan was adopted effective January 1, 1941 in accordance with a contract negotiated by Standard Oil Company (New Jersey) with Equitable Life Assurance Society.

On the same date the effective benefit plan was terminated as of December 31, 1940 and a new disability and death benefit plan was made effective as of January 1, 1941.

The latest stockholders meeting of which the minutes were examined was held on June 11, 1940. The directors elected at that meeting were: L. L. Tonkin, J. C. Chisler, S. E. W. Burnside, C. C. Reed, H. R. Livingston.

On the same date the following officers were elected by the above board of directors:

Officers:
President and Manager, L. L. Tonkin.
Vice President, J. C. Chisler.
Secretary, S. E. W. Burnside.
Treasurer, J. C. Chisler.
Assistant Secretary, Denton Borger.
Assistant Secretary, John W. Schott.
Assistant Treasurer, H. R. Livingston.
Assistant Treasurer, J. C. Cross.
General Superintendent, C. C. Reed.
Assistant Superintendent, John A. Clark.

The minutes of the directors' meetings to and including February 18, 1941, have been examined and no changes in the above directors and officers have been recorded.

As of December 31, 1940, the authorized capital stock of the company was $35,000,000, divided into 350,000 shares of common stock having a par value of $100 per share.

The outstanding capital stock as of the above date was 279,693 shares, having an aggregate par value of $27,969,300, of which $11,000,000 was issued in the form of stock dividends.

A summary of the various changes in the authorized and issued capital stock is as follows:

| Date | Capital stock authorized | Issued | | Total outstanding |
|---|---|---|---|---|
| | | For cash or other assets | Stock dividends | |
| Sept. 14, 1898 | $500,000 | $200,000 | | $200,000 |
| Dec. 16, 1898 | 500,000 | 300,000 | | 500,000 |
| March 21, 1908 | 15,000,000 | 4,500,000 | $5,000,000 | 10,000,000 |
| Dec. 31, 1908 | 15,000,000 | 25,000 | | 10,025,000 |
| April 10, 1909 | 15,000,000 | 75,000 | | 10,100,000 |
| April 22, 1910 | 15,000,000 | 600,000 | | 10,700,000 |
| Sept. 6, 1910 | 15,000,000 | 1,800,000 | | 12,500,000 |
| March 2, 1911 | 15,000,000 | 500,000 | | 13,000,000 |
| Aug. 25, 1911 | 15,000,000 | 1,250,000 | | 14,250,000 |
| Dec. 9, 1912 | 20,000,000 | | | 14,250,000 |
| Dec. 30, 1912 | 20,000,000 | 2,750,000 | | 17,000,000 |
| 27 Jan. 24, 1913 | 20,000,000 | 2,000,000 | | 19,000,000 |
| Feb. 28, 1914 | 20,000,000 | | $1,000,000 | 20,000,000 |
| Aug. 25, 1916 | 50,000,000 | | | 20,000,000 |
| June 26, 1922 | 35,000,000 | | | 20,000,000 |
| Dec. 21, 1922 | 35,000,000 | | 5,000,000 | 25,000,000 |
| Mar. 19, 1926 | 35,000,000 | 1,600,000 | | 26,600,000 |
| June 11, 1929 | 35,000,000 | [1] 1,369,300 | | 27,969,300 |

[1] Issued in exchange for property and assets of Clarksburg Light & Heat Company.

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The first dividend declared by the company was 50,000 shares of capital stock of a par value of $100 per share, or an aggregate sum of $5,000,000. This was declared at a meeting of the Board of Directors on May 15, 1908, and represented 10 shares of stock for each share presently held. At the same time, Standard Oil Company (New Jersey) purchased 45,000 shares of capital stock for $4,500,000 in cash, at par.

As a result of this sale of stock and the declaration of the stock dividend, the outstanding capital stock was increased from $500,000 to $10,000,000.

Later in the year 1908 (October 21) the first cash dividend of the company was declared in the amount of $1,000,000 or 10% of the outstanding capital stock.

During each of the calendar years from 1908 to 1940, inclusive, (except the year 1919) cash dividends in substantial amounts were paid. These ranged from $600,000 paid during the year 1918, which was 3% of the outstanding capital stock as of that date, to $10,520,000 paid in the year 1920, which was 52.6% of the outstanding capital stock as of December 31 of that year; but was over 75% of the capital stock that had been issued up to that time directly for cash or other assets.

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Cash dividends paid during the latest three years of operations, namely 1938, 1939, and 1940 were 10% of the outstanding stock, and during the 33-year period above-mentioned, there were but eight years that the cash dividend rate was less than 10%. These were as follows:

| | Percent | | Percent |
|---|---|---|---|
| 1911 | 9 | 1919 | 0 |
| 1913 | 7 | 1932 | 5 |
| 1914 | 6 | 1933 | 3 |
| 1918 | 3 | 1937 | 7 |

The annual average cash dividends from 1908 to 1940, inclusive, was $2,947,686 which is 12.8% of the annual average outstanding capital stock during that period.

Stock dividends in the aggregate amount of $11,000,000 have been paid as follows:

| | |
|---|---|
| 1908 | $5,000,000 |
| 1914 | 1,000,000 |
| 1922 | 5,000,000 |

As of December 31, 1940, Standard Oil Company (New Jersey) owned all of the outstanding capital stock of the company (except qualifying shares).

Schedule No. 1 is a summary by years, from the inception of the company to December 31, 1940, of the invested capital, the net surplus credits and the ratio of the annual net surplus credits to the average annual invested capital.[1]

The amounts shown in column (e) "Average Investment During Year" is the simple average of the sum of the outstanding capital stock and the earned surplus at the beginning and end of each year. The ratio or percent of net surplus credit to the average investment as shown in column (m) is the result of dividing the annual net surplus credits as shown in column (i) by the average invested capital as shown in column (e).

The average annual amount of invested capital over the entire period from 1899 (the first year of operations of the company) to 1940, inclusive, was $23,198,278. The average annual net earnings plus or minus surplus adjustments amounted to $2,772,739.77, or 11.95% of the average annual invested capital.

The above stated amounts and percentages are based on unadjusted book figures. The result of the examiners' study of depreciation and depletion expenses, etc., shows a net credit to surplus of $16,264,918 as of December 31, 1938, as presented in the various reports in connection with the examination of the records. Application of the aggregate amount of these adjustments to the invested capital and to the total earnings of the company results in the following:

| | |
|---|---|
| Average annual capital and surplus | [1] $23,585,537 |
| Average annual net earnings (including surplus adjustments) | [1] 3,159,470 |
| Average rate of earnings to average invested capital—percent | 13.4 |

[1] Subject to slight adjustment for depreciation, depletion, etc., for 1939 and 1940.

Certain exceptional items appear in Schedule No. 1, particularly in columns (g) and (h), which are surplus credits and debits, respectively. A summary of some of the larger of these items is as follows:

Surplus credits:

Year

1908—Includes adjustment of depreciation charges in prior years to restore $1,651,600.82.

1916—Includes enhanced value of leases sold to United Fuel Gas Company in 1910, $462,332.35.

1921—Includes depreciation restored on property retired in 1920, $524,880.79 and adjustment of 1920 Federal income tax in the amount of $106,637.34.

[1] Invested capital as herein used, means the total outstanding capital stock, plus the unappropriated earned surplus.

Surplus credits:

Year

1925—Includes adjustment of overaccrued and overpaid Federal income tax and interest in the following amounts: 1924, $223,884.67; 1909 to 1918, $168,446.39.

1927—Includes adjustment of Federal income tax for years 1917, 1918, and 1919 (consolidated with Standard Oil Company (New Jersey)), set up in 1923 in the amount of $1,400,000, reduced to $400,000.

1929—Adjustment of amortization of leaseholds from January 1, 1921, to October 31, 1929, in the amount of $545,681.41.

1934—Includes the restoration of depreciation and depletion accruals, years 1927 to 1933, inclusive, in the amount of $5,901,317.53, and transfer of losses on property retired from surplus to reserves, for the years 1927 to 1933, inclusive, in the amount of $491,579.45.

31 Surplus debits:

Year

1916—Includes $210,509.82 closing depreciation and adjustment account, gas investment.

1919—Losses on property abandoned and dismantled, Hastings coal mine, $127,680.79; Intangibles in Wright Producer construction, $314,635.93.

1923—Additional taxes accrued, years 1917, 1918, and 1919, $1,400,000 ($1,000,000 of this amount was reversed in 1927, see surplus credits).

1926—Includes:

Judgment and interest in favor of Ideal Gasoline Company re gasoline extraction plant, $227,336.49.

Disposition of Parkersburg warehouse and shop equipment, $161,393.99.

Amount transferred to reserve for annuities, $100,000.00.

1930—Setting up supplemental reserve for annuities, $530,080.00.

1931—Amount transferred to reserve for annuities, $2,242,234.38.

Dividends:

Year

1920—Includes the payment of $4,520,000 to stockholders, being amount realized from sale of gasoline extraction plants.

1935—Includes distribution of $88,194.59 in stock of other companies.

Schedule No. 2 is a statement of capital stock outstanding by years from the inception of the company (1898) to 1940, the amount of dividends paid during the same period and the various dividend rates as related to the par value of the outstanding stock.

The annual outstanding stock is separated into two categories, namely, the amount issued in the form of stock dividends and the amount issued for cash or other assets. At December 31, 1940, the former amounted to $11,000,000 and the latter $16,969,300, making a total of $27,969,300.



32 The annual dividends shown in the schedule are also separated into two categories, segregating the stock dividends from those paid in cash.

It will be noted that the total amount of dividends paid during the entire existence of the company was $108,273,640, of which $11,000,000 was in the nature of capital stock of Hope Natural Gas Company. The balance of $97,273,640 was paid in cash (excepting $88,194.59, which was represented by stocks of other companies).

For purposes of comparison, the dividend rates are shown in the schedule calculated on two bases. Column (h) shows the annual rates of all dividends to the total outstanding stock and column (i) shows the annual rates of cash dividends to the par value of the capital stock that was issued for cash or other assets.

At the foot of Schedule No. 2, annual averages from the inception of the company are shown for: (a) par value of capital stock issued for cash or other assets; (b) annual cash dividends; and (c) annual yield on the average annual outstanding capital stock that was issued for cash or other assets. The average annual yield on this basis is 20.4%.

Further data, not shown in Schedule No. 2, but derived therefrom, are as follows:

| | |
|---|---|
| 33 Average annual total capital stock outstanding | $18,161,467. |
| Average annual dividends (all classes) | 2,577,944. |
| Average rate of dividends to total capital stock | 14.19%. |

All averages shown in Schedule No. 2 and in the above table are based on the 42-year period from January 1, 1899 (the first year of operations) to December 31, 1940.

Schedule No. 3 is a summary of the Balance Sheet accounts per books, unadjusted as of December 31 of each year from the inception of the company (1898) to 1940.

A separate report has been prepared by the accounting staff on the balance sheet accounts as of December 31, 1938. Further details concerning the balance sheet accounts are shown in that report which is identified as another exhibit in the present proceeding.

Schedule No. 4 is a summary of the income accounts and surplus adjustments per books, unadjusted, from the inception of the company to December 31, 1940. This schedule shows by years the gross revenues, the revenue deductions, the surplus adjustments, dividends paid, and the surplus balance at the end of each year.

Further details relating to the income accounts for the
34 years ended December 31, 1937, 1938, and 1939, and the examiners' adjustments as applied thereto are presented in a separate exhibit in this proceeding.

SAMUEL I. NICHOLS,
Samuel I. Nichols,
*Senior Examiner of Accounts.*
EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

Washington, D. C., April 25, 1941.
Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*
CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

## HOPE NATURAL GAS COMPANY

*Summary of capital accounts, earnings, dividends paid, and ratio of net surplus credits to average invested capital, years 1898 to 1940, inclusive*

| Year | Capital accounts (per books) Dec. 31 | | | Average investment during year | Per books | | | | Dividends paid (per books) | | | Percent net surplus credit to average investment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Net earnings | Surplus adjustments | | Net surplus credit | | | | |
| | Capital stock | Earned surplus | Total | | | Credit | Debit | | Cash | Stock | Total | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) |
| 1898 | $500,000.00 | | $500,000.00 | $250,000 | | | | | | | | |
| 1899 | 500,000.00 | $15,772.26 | 515,772.26 | 507,886 | $15,772.26 | | | $15,772.26 | | | | 3.11 |
| 1900 | 500,000.00 | 48,846.84 | 451,453.16 | 483,453 | 64,774.32 | $455.22 | | 64,319.10 | | | | 13.30 |
| 1901 | 500,000.00 | 176,321.63 | 676,321.63 | 563,887 | 225,000.15 | 50.89 | $182.57 | 224,868.47 | | | | 39.88 |
| 1902 | 500,000.00 | 106,877.36 | 606,877.36 | 641,599 | 69,586.08 | 308,851.89 | 314,710.08 | 69,444.27 | | | | 10.82 |
| 1903 | 500,000.00 | 261,364.17 | 761,364.17 | 684,121 | 119,455.62 | 120,718.17 | 85,686.98 | 154,486.81 | | | | 22.58 |
| 1904 | 500,000.00 | 89,760.93 | 589,760.93 | 675,563 | 78,704.13 | 6,301.28 | 256,608.65 | 171,603.24 | | | | 25.40 |
| 1905 | 500,000.00 | 683,879.93 | 1,183,879.93 | 886,820 | 595,856.85 | 33,136.15 | 34,874.00 | 594,119.00 | | | | 66.99 |
| 1906 | 500,000.00 | 2,111,574.38 | 2,611,574.38 | 1,897,727 | 1,429,967.98 | 48,514.94 | 50,788.47 | 1,427,694.45 | | | | 75.23 |
| 1907 | 500,000.00 | 3,348,399.18 | 3,848,399.18 | 3,229,987 | 1,326,357.90 | 12,675.48 | 102,208.58 | 1,236,824.80 | | | | 38.29 |
| 1908 | 10,000,000.00 | 423,784.51 | 10,423,784.51 | 7,136,092 | 1,524,126.64 | 1,679,043.17 | 127,784.48 | 3,075,385.33 | $1,000,000 | $5,000,000 | $6,000,000 | 43.10 |
| 1909 | 10,100,000.00 | 1,279,282.40 | 11,379,282.40 | 10,901,533 | 2,094,472.52 | 66,453.79 | 97,928.42 | 2,062,997.89 | 1,207,500 | | 1,207,500 | 18.92 |
| 1910 | 12,500,000.00 | 1,601,533.84 | 14,101,533.84 | 12,740,408 | 2,001,142.86 | 378,965.75 | 105,417.17 | 2,274,251.44 | 1,952,000 | | 1,952,000 | 17.85 |
| 1911 | 14,250,000.00 | 2,302,602.00 | 16,552,602.00 | 15,327,068 | 2,111,693.15 | 53,213.02 | 216,338.01 | 1,948,568.16 | 1,247,500 | | 1,247,500 | 12.71 |
| 1912 | 17,000,000.00 | 386,725.05 | 17,386,725.05 | 16,969,664 | 2,623,372.40 | 3,186.92 | 68,686.27 | 2,557,873.05 | 4,473,750 | | 4,473,750 | 15.07 |
| 1913 | 19,000,000.00 | 1,733,535.24 | 20,733,535.24 | 19,060,130 | 2,664,816.62 | 136,046.74 | 124,053.14 | 2,676,810.19 | 1,330,000 | | 1,330,000 | 14.04 |
| 1914 | 20,800,000.00 | 2,255,185.98 | 22,255,185.98 | 21,494,361 | 2,746,149.32 | 44,778.33 | 69,276.91 | 2,721,650.74 | 1,200,000 | 1,000,000 | 2,200,000 | 12.66 |
| 1915 | 20,000,000.00 | 3,668,528.19 | 23,668,528.19 | 22,961,857 | 4,229,207.92 | 24,901.52 | 140,767.23 | 4,113,342.21 | 2,700,000 | | 2,700,000 | 17.91 |
| 1916 | 20,000,000.00 | 7,214,459.35 | 27,214,459.35 | 25,441,494 | 6,074,270.52 | 582,586.15 | 410,925.51 | 6,245,931.16 | 2,700,000 | | 2,700,000 | 24.55 |
| 1917 | 20,000,000.00 | 10,749,084.57 | 30,749,084.57 | 28,981,772 | 5,825,738.77 | 77,376.11 | 68,489.66 | 5,834,625.22 | 2,300,000 | | 2,300,000 | 20.13 |
| 1918 | 20,000,000.00 | 13,222,149.32 | 33,222,149.32 | 31,985,617 | 3,163,906.67 | 5,308.88 | 96,150.80 | 3,073,064.75 | 600,000 | | 600,000 | 9.61 |
| 1919 | 20,000,000.00 | 15,209,121.71 | 35,209,121.71 | 34,215,636 | 2,328,167.99 | 141,564.75 | 482,760.35 | 1,986,972.39 | | | | 5.81 |

## HOPE NATURAL GAS COMPANY—Continued

*Summary of capital accounts, earnings, dividends paid, and ratio of net surplus credits to average invested capital, years 1898 to 1940, inclusive*—Continued

| Year | Capital accounts (per books) Dec. 31 | | | Average investment during year | Per books | | | | Dividends paid (per books) | | | Percent net surplus credit to average investment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Net earnings | Surplus adjustments | | Net surplus credit | | | | |
| | Capital stock | Earned surplus | Total | | | Credit | Debit | | Cash | Stock | Total | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) |
| 1920 | | 20,000,000.00 | 9,816,427.53 | 29,816,427.53 | 32,512,775 | 5,387,032.02 | 138,116.31 | 397,842.51 | 5,127,305.82 | 10,520,000 | | 10,520,000 | 15.77 |
| 1921 | | 20,000,000.00 | 9,748,128.33 | 29,748,128.33 | 29,782,278 | 1,449,175.64 | 778,644.52 | 296,119.36 | 1,931,700.80 | 2,000,000 | | 2,000,000 | 6.49 |
| 1922 | | 25,000,000.00 | 6,257,146.98 | 31,257,146.98 | 30,502,638 | 5,779,190.42 | 327,212.90 | 97,384.67 | 6,009,018.65 | 4,500,000 | 5,000,000 | 9,500,000 | 19.70 |
| 1923 | | 25,000,000.00 | 6,778,497.90 | 31,778,497.90 | 31,517,822 | 6,621,973.39 | 362,169.56 | 1,462,792.03 | 5,521,350.92 | 5,000,000 | | 5,000,000 | 17.52 |
| 1924 | | 25,000,000.00 | 10,351,122.05 | 35,351,122.05 | 33,564,810 | 6,007,891.37 | 231,802.99 | 167,070.21 | 6,072,624.15 | 2,500,000 | | 2,500,000 | 18.09 |
| 1925 | | 25,000,000.00 | 12,360,434.70 | 37,360,434.70 | 36,355,778 | 4,234,451.36 | 438,590.26 | 162,728.97 | 4,510,312.65 | 2,500,000 | | 2,500,000 | 12.40 |
| 1926 | | 26,000,000.00 | 10,330,302.85 | 36,330,302.85 | 37,145,369 | 5,158,443.78 | 82,052.20 | 620,627.83 | 4,619,868.15 | 6,650,000 | | 6,650,000 | 12.44 |
| 1927 | | 26,000,000.00 | 10,201,216.31 | 36,201,216.31 | 36,765,760 | 2,614,964.68 | 1,238,434.26 | 192,485.48 | 3,660,913.46 | 3,990,000 | | 3,990,000 | 9.96 |
| 1928 | | 26,000,000.00 | 9,042,882.79 | 35,042,882.79 | 36,122,050 | 3,436,317.21 | 88,557.61 | 493,208.34 | 3,031,666.48 | 3,990,000 | | 3,990,000 | 8.39 |
| 1929 | | 27,969,300.00 | 9,417,250.18 | 37,386,550.18 | 36,514,716 | 4,220,532.01 | 668,124.87 | 455,824.49 | 4,432,832.39 | 4,058,465 | | 4,058,465 | 12.14 |
| 1930 | | 27,969,300.00 | 6,752,230.98 | 34,721,530.98 | 36,054,041 | 2,266,735.47 | 28,214.49 | 764,574.16 | 1,530,375.80 | 4,195,395 | | 4,195,395 | 4.24 |
| 1931 | | 27,969,300.00 | 1,820,633.25 | 29,789,933.25 | 32,255,732 | 1,646,681.98 | 69,496.42 | 2,452,381.13 | *736,802.73* | 4,195,395 | | 4,195,395 | *2.28* |
| 1932 | | 27,969,300.00 | *196,288.56* | 28,165,588.56 | 28,977,761 | 40,513.22 | 143,210.26 | 409,602.17 | *225,879.69* | 1,398,465 | | 1,398,465 | .78 |
| 1933 | | 27,969,300.00 | 552,027.55 | 28,521,327.55 | 28,343,458 | 1,191,070.15 | 30,545.89 | 26,798.05 | 1,194,817.99 | 839,079 | | 839,079 | 4.22 |
| 1934 | | 27,969,300.00 | 6,060,916.88 | 34,030,216.88 | 31,275,772 | 1,945,641.38 | 6,553,939.47 | 193,761.52 | 8,305,819.33 | 2,796,930 | | 2,796,930 | 26.56 |
| 1935 | | 27,969,300.00 | 4,419,169.30 | 32,388,469.30 | 33,209,343 | 2,737,324.48 | 36,638.03 | 132,120.50 | 2,641,842.01 | 4,283,590 | | 4,283,590 | 7.96 |
| 1936 | | 27,969,300.00 | 5,688,519.21 | 33,657,819.21 | 33,023,144 | 4,063,950.07 | 2,329.84 | | 4,066,279.91 | 2,796,930 | | 2,796,930 | 12.31 |
| 1937 | | 27,969,300.00 | 6,554,696.81 | 34,523,996.81 | 34,090,908 | 2,803,431.94 | *23,038.10* | 2,441.44 | 2,824,028.60 | 1,957,851 | | 1,957,851 | 8.28 |
| 1938 | | 27,969,300.00 | 5,194,107.77 | 33,163,407.77 | 33,843,702 | 1,398,655.49 | 37,685.47 | | 1,436,340.96 | 2,796,930 | | 2,796,930 | 4.24 |
| 1939 | | 27,969,300.00 | 5,253,489.76 | 33,222,789.76 | 33,193,099 | 2,528,983.64 | 357,441.21 | 30,112.86 | 2,856,311.99 | 2,796,930 | | 2,796,930 | 8.61 |
| 1940 | | 27,969,300.00 | 8,159,170.86 | 36,128,470.86 | 34,675,630 | 5,656,968.99 | 45,612.11 | | 5,702,611.10 | 2,796,930 | | 2,796,930 | 16.45 |
| Annual average | | | | 23,198,278 | | | | | 2,772,210 | | | | 11.95 |

Italic figures denote deficit.

NOTE.—See text of report for special comment on certain items in columns (g), (h), and (j).

## HOPE NATURAL GAS COMPANY

***Capital stock outstanding, dividends paid, and annual dividend rates, by years, from 1898 to 1940, inclusive***

| Year | Capital stock outstanding (per books) | | | Dividends (per books) | | | Dividend rates | |
|---|---|---|---|---|---|---|---|---|
| | Total Dec. 31 | Issued as stock dividends | Issued for cash or other assets | Total | Stock | Cash | Total dividends to total stock | Cash dividends to stock issued for cash or other assets |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| | | | | | | | % | % |
| 1898 | $500,000 | | $500,000 | | | | | |
| 1899 | 500,000 | | 500,000 | | | | | |
| 1900 | 500,000 | | 500,000 | | | | | |
| 1901 | 500,000 | | 500,000 | | | | | |
| 1902 | 500,000 | | 500,000 | | | | | |
| 1903 | 500,000 | | 500,000 | | | | | |
| 1904 | 500,000 | | 500,000 | | | | | |
| 1905 | 500,000 | | 500,000 | | | | | |
| 1906 | 500,000 | | 500,000 | | | | | |
| 1907 | 500,000 | | 500,000 | | | | | |
| 1908 | 10,000,000 | $5,000,000 | 5,000,000 | $6,000,000 | 5,000,000 | $1,000,000 | 60 | 20 |
| 1909 | 10,100,000 | 5,000,000 | 5,100,000 | 1,207,500 | | 1,207,500 | 12 | 23.7 |
| 1910 | 12,500,000 | 5,000,000 | 7,500,000 | 1,952,000 | | 1,952,000 | 15.5 | 26 |
| 1911 | 14,250,000 | 5,000,000 | 9,250,000 | 1,247,500 | | 1,247,500 | 8.8 | 13.5 |
| 1912 | 17,000,000 | 5,000,000 | 12,000,000 | 4,473,750 | | 4,473,750 | 26 | 37.3 |
| 1913 | 19,000,000 | 5,000,000 | 14,000,000 | 1,330,000 | | 1,330,000 | 7 | 9.5 |
| 1914 | 20,000,000 | 6,000,000 | 14,000,000 | 2,200,000 | 1,000,000 | 1,200,000 | 11 | 8.6 |
| 1915 | 20,000,000 | 6,000,000 | 14,000,000 | 2,700,000 | | 2,700,000 | 13.5 | 19.3 |
| 1916 | 20,000,000 | 6,000,000 | 14,000,000 | 2,700,000 | | 2,700,000 | 13.5 | 19.3 |
| 1917 | 20,000,000 | 6,000,000 | 14,000,000 | 2,300,000 | | 2,300,000 | 11.5 | 16.4 |
| 1918 | 20,000,000 | 6,000,000 | 14,000,000 | 600,000 | | 600,000 | 3 | 4.3 |
| 1919 | 20,000,000 | 6,000,000 | 14,000,000 | | | | | |
| 1920 | 20,000,000 | 6,000,000 | 14,000,000 | 10,520,000 | | 10,520,000 | 52.6 | 75.1 |
| 1921 | 20,000,000 | 6,000,000 | 14,000,000 | 2,000,000 | | 2,000,000 | 10 | 14.3 |
| 1922 | 25,000,000 | 11,000,000 | 14,000,000 | 9,500,000 | 5,000,000 | 4,500,000 | 38 | 32.1 |
| 1923 | 25,000,000 | 11,000,000 | 14,000,000 | 5,000,000 | | 5,000,000 | 20 | 35.7 |
| 1924 | 25,000,000 | 11,000,000 | 14,000,000 | 2,500,000 | | 2,500,000 | 10 | 17.9 |
| 1925 | 25,000,000 | 11,000,000 | 14,000,000 | 2,500,000 | | 2,500,000 | 10 | 17.9 |
| 1926 | 26,600,000 | 11,000,000 | 15,600,000 | 6,650,000 | | 6,650,000 | 25 | 42.6 |
| 1927 | 26,600,000 | 11,000,000 | 15,600,000 | 3,990,000 | | 3,990,000 | 15 | 25.6 |
| 1928 | 26,600,000 | 11,000,000 | 15,600,000 | 3,990,000 | | 3,990,000 | 15 | 25.6 |
| 1929 | 27,969,300 | 11,000,000 | 16,969,300 | 4,058,465 | | 4,058,465 | 15 | 23.9 |
| 1930 | 27,969,300 | 11,000,000 | 16,969,300 | 4,195,395 | | 4,195,395 | 15 | 24.7 |
| 1931 | 27,969,300 | 11,000,000 | 16,969,300 | 4,195,095 | | 4,195,395 | 15 | 24.7 |
| 1932 | 27,969,300 | 11,000,000 | 16,969,300 | 1,398,465 | | 1,398,465 | 5 | 8.2 |
| 1933 | 27,969,300 | 11,000,000 | 16,969,300 | 839,079 | | 839,079 | 3 | 4.9 |
| 1934 | 27,969,300 | 11,000,000 | 16,969,300 | 2,796,930 | | 2,796,930 | 10 | 16.5 |
| 1935 | 27,969,300 | 11,000,000 | 16,969,300 | 4,283,590 | | 4,283,590 | 15 | 25.2 |
| 1936 | 27,969,300 | 11,000,000 | 16,969,300 | 2,796,930 | | 2,796,930 | 10 | 16.5 |
| 1937 | 27,969,300 | 11,000,000 | 16,969,300 | 1,957,851 | | 1,957,851 | 7 | 11.5 |
| 1938 | 27,969,300 | 11,000,000 | 16,969,300 | 2,796,930 | | 2,796,930 | 10 | 16.5 |
| 1939 | 27,969,300 | 11,000,000 | 16,969,300 | 2,796,930 | | 2,796,930 | 10 | 16.5 |
| 1940 | 27,969,300 | 11,000,000 | 16,969,300 | 2,796,930 | | 2,796,930 | 10 | 16.5 |
| Total | | | | 108,273,648 | 11,000,000 | 97,273,648 | | |

[1] Includes $4,520,000 cash dividend paid from proceeds of sale of gasoline and butane properties.

[2] Includes $88,194.59 dividend in stock of other companies.

Average annual stock outstanding, issued for cash or other assets (from inception of company) $11,328,133.

Average annual cash dividends (from inception of company), $2,316,099.

Average annual yield on average annual amount of capital stock issued for cash or other assets, 20.4%.

## HOPE NATURAL GAS COMPANY

*Comparative condensed balance sheets, per books Dec. 31, 1898, to Dec. 31, 1940, inclusive*

| Dec. 31 | Assets and other debits | | | | | Liabilities and other credits | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fixed assets | Investments and fund accounts | Current and accrued assets [1] | Deferred debits | Total | Capital stock | Long term advances, etc. [2] | Current and accrued liabilities | Depreciation and depletion reserves | Deferred credits and other reserves [2] | Surplus | Total |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) |
| 1898 | $186,263.67 | | $316,537.82 | $283.24 | $503,084.73 | $500,000.00 | | $3,014.66 | | $70.07 | | $503,084.73 |
| 1899 | 516,112.36 | | 27,903.73 | | 544,016.09 | 500,000.00 | | 28,243.83 | | | $15,772.26 | 544,016.09 |
| 1900 | 584,083.63 | | 37,442.92 | | 621,526.54 | 500,000.00 | | 98,759.55 | $71,313.83 | | 48,546.84 | 621,526.54 |
| 1901 | 508,718.60 | | 160,979.52 | | 759,698.12 | 500,000.00 | | 12,062.66 | 71,313.83 | | 176,321.63 | 759,698.12 |
| 1902 | 3,342,168.75 | | 216,090.27 | | 3,558,259.02 | 500,040.00 | $2,710,721.31 | 109,936.67 | 130,723.68 | | 106,877.36 | 3,558,259.02 |
| 1903 | 5,436,363.68 | | 620,088.53 | | 6,056,452.21 | 500,000.00 | 5,064,318.68 | 75,436.44 | 155,332.92 | | 261,364.17 | 6,056,452.21 |
| 1904 | 7,266,295.47 | | 392,884.78 | | 7,659,180.25 | 500,000.00 | 6,265,018.31 | 119,847.71 | 684,553.30 | | 89,760.93 | 7,659,180.25 |
| 1905 | 7,596,658.23 | | 529,369.99 | | 8,126,028.22 | 500,000.00 | 5,753,202.60 | 105,424.22 | 1,083,521.47 | | 683,879.93 | 8,126,028.22 |
| 1906 | 8,090,300.13 | | 660,902.77 | | 8,751,202.88 | 500,000.00 | 3,953,408.65 | 180,116.33 | 2,006,103.52 | | 2,111,574.38 | 8,751,202.88 |
| 1907 | 10,049,066.99 | | 558,767.02 | | 10,607,834.01 | 500,000.00 | 3,564,171.84 | 402,826.44 | 2,792,433.55 | | 3,348,399.18 | 10,607,834.01 |
| 1908 | 10,833,232.51 | | 952,530.01 | | 11,785,762.52 | 10,000,000.00 | | 221,145.28 | 1,140,832.73 | | 423,784.51 | 11,785,762.52 |
| 1909 | 12,508,95..99 | | 1,034,630.09 | | 13,543,582.08 | 10,109,000.00 | | 1,023,466.95 | 1,140,832.73 | | 1,279,282.40 | 13,543,582.08 |
| 1910 | 16,644,381.03 | | 1,707,982.61 | | 18,352,363.64 | 12,500,000.00 | | 1,850,817.02 | 2,400,012.78 | | 1,601,533.84 | 18,352,363.64 |
| 1911 | 18,129,652.37 | | 1,352,511.99 | | 19,482,164.36 | 14,250,000.00 | | 529,549.58 | 2,400,012.78 | | 2,302,602.00 | 19,482,164.36 |
| 1912 | 19,928,871.29 | | 1,399,722.26 | | 21,328,593.55 | 17,000,000.00 | | 701,407.63 | 3,240,460.87 | | 386,725.05 | 21,328,593.55 |
| 1913 | 21,919,941.16 | 2,016,010.00 | 2,438,128.80 | | 26,374,079.96 | 19,000,000.00 | | 1,473,539.63 | 4,167,005.09 | | 1,733,535.24 | 26,374,079.96 |
| 1914 | 23,118,720.54 | 3,141,010.00 | 2,570,100.87 | | 28,829,831.41 | 20,000,000.00 | | 1,398,125.54 | 5,176,519.89 | | 2,255,185.98 | 28,829,831.41 |
| 1915 | 24,476,242.37 | 3,141,010.00 | 3,198,407.29 | | 30,815,659.66 | 20,000,000.00 | | 883,681.85 | 6,263,449.62 | | 3,668,528.19 | 30,815,659.66 |
| 1916 | 29,355,051.09 | 3,141,010.00 | 3,754,278.40 | | 36,250,339.49 | 20,000,000.00 | | 1,577,649.82 | 7,458,230.32 | | 7,214,459.35 | 36,250,339.49 |
| 1917 | 34,753,834.20 | 3,141,010.00 | 3,531,125.25 | | 41,425,969.45 | 20,000,000.00 | | 1,882,787.38 | 8,794,097.50 | | 10,749,084.57 | 41,425,969.45 |
| 1918 | 37,810,541.09 | 3,141,010.00 | 5,628,232.11 | | 46,579,783.20 | 20,000,000.00 | | 2,998,977.07 | 10,358,656.81 | | 13,222,149.32 | 46,579,783.20 |
| 1919 | 37,849,597.85 | 3,141,010.00 | 7,848,811.82 | | 48,839,419.67 | 20,000,000.00 | | 1,649,421.57 | 11,980,876.39 | | 15,209,121.71 | 48,839,419.67 |
| 1920 | 32,410,554.34 | 3,141,040.00 | 9,004,931.30 | | 44,556,495.64 | 20,000,000.00 | | 2,162,109.02 | 12,577,959.09 | | 9,816,427.53 | 44,556,495.64 |
| 1921 | 33,308,323.09 | 3,141,010.00 | 9,028,249.30 | | 45,477,582.39 | 20,000,000.00 | | 2,005,422.84 | 13,689,104.15 | 34,927.07 | 9,748,128.33 | 45,477,582.39 |

## HOPE NATURAL GAS COMPANY

*Comparative income account and surplus per company's statements (see note), years 1898 to 1939, inclusive*

| Year | Operating revenues | | | Operating expenses | | | | | Net operating income | Other income | Income deductions | Net income (to surplus) | Surplus | | | Balance Dec. 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gas sales | Other operating revenues (net) | Total | Operation and maintenance | Gas purchased | Taxes | Depreciation | Total | | | | | Other additions | Dividends paid | Other deductions | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) |
| 1898 | | | | | | | | | | | | | | | | |
| 1899 | $19,048.20 | | $19,048.20 | $2,514.83 | | $1,158.72 | | $3,673.55 | $15,374.65 | $597.61 | | $15,772.26 | | | | $15,772.26 |
| 1900 | 129,446.17 | | 129,446.17 | 42,704.65 | | 1,047.85 | $151,036.75 | 194,789.25 | *65,343.08* | 568.76 | | *64,774.32* | $455.22 | | | *48,846.84* |
| 1901 | 296,480.29 | | 296,480.29 | 59,423.48 | | 1,345.36 | 11,898.06 | 72,666.90 | 223,813.39 | 1,186.76 | | 225,000.15 | 50.89 | | $182.57 | 176,321.63 |
| 1902 | 696,697.87 | | 696,697.87 | 274,261.84 | | 4,956.25 | 476,466.17 | 755,684.26 | *58,986.39* | 1,880.30 | $6,479.99 | *62,586.08* | 308,851.80 | | 314,710.08 | 108,877.36 |
| 1903 | 1,222,962.67 | $648.81 | 1,223,611.48 | 451,363.99 | | 8,235.00 | 579,132.44 | 1,038,731.52 | 184,879.96 | 1,473.11 | 66,897.45 | 119,455.62 | 120,718.17 | | 85,686.98 | 261,364.17 |
| 1904 | 2,000,530.98 | 1,585.28 | 2,002,116.26 | 597,061.52 | | 15,189.33 | 1,228,914.53 | 1,841,165.38 | 160,950.88 | 2,213.54 | 84,460.29 | 78,704.13 | 6,301.28 | | 256,608.65 | 89,760.93 |
| 1905 | 2,294,016.24 | 12,982.08 | 2,306,998.32 | 769,832.24 | | 44,408.39 | 974,247.71 | 1,788,488.84 | 518,509.48 | 182,179.72 | 104,832.35 | 595,856.85 | 33,136.15 | | 34,874.00 | 683,879.93 |
| 1906 | 3,465,611.33 | 5,012.52 | 3,470,623.85 | 716,778.78 | $10,800.39 | 40,902.88 | 1,327,819.93 | 2,096,301.98 | 1,374,321.87 | 173,851.91 | 118,205.80 | 1,429,967.98 | 45,514.94 | | 50,788.47 | 2,111,574.38 |
| 1907 | 3,948,867.20 | 999.48 | 3,948,257.72 | 1,235,313.85 | 95,477.88 | 82,878.00 | 1,316,859.42 | 2,730,529.15 | 1,217,828.57 | 188,284.62 | 79,755.29 | 1,326,357.90 | 12,675.48 | | 102,209.58 | 3,348,309.18 |
| 1908 | 3,521,172.72 | 13,572.49 | 3,534,745.21 | 1,603,124.81 | 40,553.34 | 93,029.79 | 429,093.54 | 2,165,801.48 | 1,368,943.73 | 225,270.37 | 70,087.46 | 1,524,126.64 | 1,679,043.17 | $6,000,000.00 | 127,784.48 | 423,784.51 |
| 1909 | 5,075,140.12 | 39,856.14 | 5,114,996.26 | 1,979,165.49 | 292,510.84 | 88,939.09 | 808,036.91 | 3,258,652.33 | 1,856,343.93 | 246,880.87 | 8,752.28 | 2,094,472.52 | 66,453.79 | 1,207,500.00 | 97,925.42 | 1,279,282.40 |
| 1910 | 7,007,988.61 | 27,312.18 | 7,035,300.79 | 2,360,766.74 | 960,914.21 | 154,404.72 | 1,808,257.68 | 5,284,343.35 | 1,750,957.44 | 303,382.15 | 53,236.73 | 2,001,102.86 | 378,965.75 | 1,952,000.00 | 105,817.17 | 1,601,533.84 |
| 1911 | 7,540,482.90 | 23,852.80 | 7,564,335.70 | 2,838,035.26 | 1,291,514.71 | 162,818.39 | 1,406,274.85 | 5,698,643.21 | 1,865,692.49 | 287,221.36 | 41,220.70 | 2,111,693.15 | 53,213.02 | 1,947,800.00 | 216,338.01 | 2,302,602.00 |
| 1912 | 8,569,058.29 | 70,428.79 | 8,669,487.08 | 2,771,857.99 | 1,213,487.32 | 159,599.46 | 2,213,383.59 | 6,358,328.36 | 2,311,158.72 | 319,351.12 | 7,137.44 | 2,623,372.40 | 3,186.92 | 4,473,750.00 | 68,686.27 | 386,725.05 |
| 1913 | 8,803,935.24 | 284,659.91 | 9,088,595.15 | 2,852,842.65 | 1,173,712.35 | 211,690.56 | 2,512,560.95 | 6,760,716.53 | 2,327,878.62 | 349,094.80 | 12,156.80 | 2,664,816.62 | 136,046.71 | 1,330,000.00 | 124,053.14 | 1,733,535.24 |
| 1914 | 8,986,733.54 | 278,508.76 | 9,265,242.30 | 3,202,281.26 | 1,074,805.68 | 238,946.03 | 2,707,214.21 | 7,223,247.18 | 2,041,995.12 | 733,447.13 | 29,292.93 | 2,756,149.32 | 44,778.33 | 2,200,000.00 | 69,276.91 | 2,255,185.98 |
| 1915 | 9,334,799.61 | 430,616.56 | 9,765,416.17 | 2,898,736.31 | 973,528.58 | 271,427.25 | 2,085,763.61 | 6,229,455.75 | 3,535,960.42 | 694,415.73 | 1,168.23 | 4,229,207.92 | 24,901.52 | 2,700,000.00 | 140,767.23 | 3,668,528.19 |
| 1916 | 12,785,685.84 | 972,384.13 | 13,758,069.97 | 2,958,674.16 | 1,351,040.57 | 358,337.86 | 2,868,405.89 | 8,536,458.48 | 5,221,611.49 | 853,746.88 | 1,087.85 | 6,074,270.52 | 582,596.15 | 2,700,000.00 | 410,925.51 | 7,214,450.32 |
| 1917 | 14,240,375.31 | 1,528,297.33 | 15,768,672.64 | 4,856,611.71 | 2,179,748.54 | 578,787.20 | 3,248,887.74 | 10,864,035.19 | 4,904,637.45 | 927,340.19 | 6,238.87 | 5,825,738.77 | 77,376.11 | 2,300,000.00 | 68,489.66 | 10,749,084.57 |
| 1918 | 13,991,309.36 | 1,637,915.19 | 15,629,224.55 | 6,329,307.25 | 2,305,929.70 | 1,632,851.71 | 3,260,998.16 | 13,538,036.82 | 2,091,187.73 | 1,088,710.97 | 15,992.03 | 3,163,906.67 | 5,308.88 | 600,000.00 | 96,150.80 | 13,222,149.22 |
| 1919 | 12,670,007.38 | 2,408,463.22 | 15,078,470.60 | 7,054,748.82 | 1,939,975.43 | 788,440.23 | 3,471,087.10 | 13,834,251.58 | 1,224,219.02 | 1,121,844.47 | 17,895.50 | 2,328,167.99 | 141,564.75 | | 482,760.35 | 15,209,121.71 |
| 1920 | 17,034,889.50 | 697,290.54 | 17,732,180.04 | 8,086,458.74 | 1,906,080.51 | 821,338.99 | 2,831,977.29 | 13,735,855.53 | 3,996,324.51 | 1,400,079.01 | 9,371.50 | 5,387,032.02 | 138,116.31 | 10,520,000.00 | 397,842.51 | 9,816,427.43 |
| 1921 | 12,772,401.07 | 469,850.28 | 13,242,251.35 | 6,381,991.33 | 2,370,100.76 | 719,831.10 | 2,925,958.11 | 12,397,881.30 | 844,370.05 | 953,408.92 | 348,603.33 | 1,449,175.64 | 778,844.52 | 2,000,000.00 | 296,119.36 | 9,748,128.33 |
| 1922 | 15,795,956.11 | 395,436.35 | 16,191,392.46 | 4,914,549.48 | 2,851,246.18 | 1,215,097.12 | 2,429,428.46 | 11,410,321.24 | 4,780,871.22 | 1,226,382.24 | 228,063.04 | 5,779,190.42 | 327,212.90 | 9,500,000.00 | 97,394.67 | 6,257,146.98 |
| 1923 | 17,778,070.32 | 350,375.44 | 18,128,445.76 | 4,504,106.95 | 4,232,061.87 | 1,286,893.06 | 2,741,238.58 | 12,764,300.46 | 5,364,145.30 | 1,437,127.13 | 179,299.04 | 6,621,973.39 | 362,169.56 | 5,000,000.00 | 1,462,792.03 | 6,778,497.90 |
| 1924 | 18,006,316.00 | 186,834.13 | 18,193,150.13 | 4,813,726.04 | 4,925,066.42 | 1,389,327.53 | 2,766,340.45 | 13,894,460.44 | 4,298,689.69 | 1,921,223.60 | 212,021.92 | 6,007,891.37 | 231,802.99 | 2,500,000.00 | 167,070.21 | 10,381,122.05 |
| 1925 | 17,918,723.42 | 225,026.69 | 18,143,750.11 | 5,027,623.09 | 5,885,012.76 | 1,176,754.22 | 2,966,454.01 | 15,055,844.08 | 3,087,906.03 | 1,411,729.99 | 265,184.66 | 4,234,451.36 | 438,590.26 | 2,500,000.00 | 163,728.97 | 12,360,434.70 |
| 1926 | 20,661,752.15 | 223,044.53 | 20,884,796.68 | 5,512,959.82 | 7,545,636.19 | 1,475,341.89 | 2,872,050.71 | 17,405,988.61 | 3,478,808.07 | 1,870,316.02 | 190,680.31 | 5,158,443.78 | 82,052.20 | 6,650,000.00 | 620,627.83 | 10,330,302.85 |
| 1927 | 19,363,078.52 | 163,344.80 | 19,526,423.32 | 5,735,411.03 | 8,322,860.41 | 1,124,259.58 | 2,808,947.09 | 17,991,478.11 | 1,534,945.21 | 1,234,074.09 | 154,054.62 | 2,614,964.68 | 1,238,434.26 | 3,990,000.00 | 192,485.48 | 10,001,216.31 |
| 1928 | 20,634,648.98 | 187,994.77 | 20,822,643.75 | 5,363,203.15 | 9,005,892.08 | 1,389,133.88 | 2,651,035.67 | 18,429,354.78 | 2,393,288.97 | 1,313,225.67 | 270,197.43 | 3,436,317.21 | 88,557.61 | 3,990,000.00 | 493,208.34 | 9,042,882.79 |
| 1929 | 22,047,733.47 | 213,502.19 | 22,261,235.66 | 5,337,145.57 | 9,500,697.72 | 1,529,822.43 | 2,659,836.36 | 19,027,502.22 | 3,233,733.44 | 1,155,726.25 | 168,927.68 | 4,220,532.01 | 668,124.87 | 4,058,465.00 | 455,824.49 | 9,417,250.18 |
| 1930 | 19,930,672.16 | 198,435.01 | 20,127,107.17 | 5,471,925.17 | 9,530,549.16 | 1,359,427.97 | 2,677,473.73 | 18,939,376.03 | 1,187,731.14 | 1,295,633.73 | 216,629.40 | 2,266,735.47 | 28,214.49 | 4,195,395.00 | 764,574.16 | 6,752,230.98 |
| 1931 | 17,993,136.79 | 134,353.97 | 18,127,490.76 | 4,546,909.27 | 9,016,616.53 | 1,304,322.03 | 2,560,452.74 | 17,428,300.57 | 699,190.19 | 1,161,925.16 | 214,433.37 | 1,646,681.98 | 69,496.42 | 4,195,395.00 | 2,452,381.13 | 1,926,693.23 |
| 1932 | 14,205,835.17 | 96,484.66 | 14,302,319.83 | 4,053,351.39 | 7,671,490.06 | 1,053,994.07 | 2,328,628.15 | 15,107,463.67 | *805,143.84* | 989,683.56 | 144,026.50 | 40,513.22 | 143,210.26 | 1,398,465.00 | 409,603.17 | 186,288.56 |
| 1933 | 14,120,615.78 | 99,229.82 | 14,219,845.60 | 3,721,119.07 | 7,034,827.25 | 1,100,327.67 | 1,997,514.46 | 13,853,788.45 | 366,057.15 | 910,588.51 | 85,575.51 | 1,191,070.15 | 30,545.89 | 839,079.00 | 26,798.05 | 552,027.59 |
| 1934 | 15,986,395.42 | 157,863.20 | 16,144,258.62 | 3,784,982.84 | 8,449,290.98 | 1,176,455.81 | 1,692,887.55 | 15,103,617.18 | 1,040,641.44 | 1,055,084.36 | 150,084.42 | 1,945,641.38 | 6,553,939.47 | 2,796,930.00 | 193,761.52 | 6,060,918.89 |
| 1935 | 16,976,038.37 | 182,082.97 | 17,158,121.34 | 4,150,636.24 | 7,549,315.86 | 1,332,699.46 | 1,845,975.57 | 14,878,647.13 | 2,279,474.21 | 656,034.27 | 198,184.00 | 2,737,324.48 | 36,638.03 | 4,283,589.59 | 132,120.80 | 4,419,169.30 |
| 1936 | 20,138,712.17 | 184,395.28 | 20,323,107.45 | 5,064,156.90 | 8,053,140.64 | 1,638,428.97 | 2,012,676.75 | 16,768,403.26 | 3,554,704.19 | 591,792.42 | 82,546.54 | 4,063,950.07 | 2,329.84 | 2,796,930.00 | | 5,686,319.21 |
| 1937 | 20,366,473.19 | 452,070.37 | 20,818,543.56 | 5,594,329.46 | 9,291,272.53 | 1,583,124.94 | 1,982,009.69 | 18,450,736.62 | 2,367,806.94 | 455,358.30 | 19,733.30 | 2,803,431.94 | 23,038.10 | 1,957,851.00 | 2,441.44 | 6,564,606.81 |
| 1938 | 16,941,830.32 | 363,888.86 | 17,305,719.18 | 5,455,422.16 | 8,169,545.71 | 1,145,422.31 | 1,663,115.04 | 16,433,505.25 | 872,213.93 | 548,071.82 | 21,630.26 | 1,398,655.49 | 37,685.47 | 2,796,930.00 | | 5,194,107.77 |
| 1939 | 18,118,709.89 | 337,079.18 | 18,455,789.07 | 5,770,435.49 | 7,746,853.78 | 1,436,731.75 | 1,218,400.00 | 16,172,421.02 | 2,283,368.05 | 258,455.74 | 12,840.15 | 2,528,983.64 | [1] 357,441.21 | 2,796,930.60 | 30,112.86 | 5,253,489.76 |
| 1940 | 24,362,454.07 | 326,122.23 | 24,688,576.30 | 6,793,507.64 | 8,629,481.02 | 2,464,514.26 | 1,463,585.94 | 19,351,088.36 | 5,337,487.44 | 317,427.66 | *2,083.89* | 5,656,998.99 | 56,673.25 | 2,796,930.00 | 11,061.14 | 8,139,170.96 |
| Total | 507,784,792.74 | 13,378,291.98 | 521,163,084.72 | 157,459,468.46 | 162,681,037.99 | 32,672,353.72 | 82,081,475.73 | 434,894,535.90 | 86,268,548.82 | 29,866,090.82 | 3,894,901.08 | 112,239,738.56 | 15,417,047.03 | 108,273,639.59 | 11,223,975.14 | 8,159,170.96 |

NOTE.—This schedule was prepared from the company's financial statements with minor reclassifications necessary for uniformity.

[1] Includes $327,428.71 surplus of Reserve Gas Company taken over in merger as of December 30, 1939.

Italic figures denote deficit.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922 | 32,934,915.66 | 3,128,775.50 | 12,587,065.75 | | 48,650,756.91 | 25,000,000.00 | | 2,367,627.93 | 14,973,054.93 | 52,927.07 | 6,257,146.98 | 48,650,756.91 |
| 1923 | 35,091,286.37 | 8,189,593.48 | 14,810,031.16 | | 53,090,911.01 | 25,000,000.00 | | 4,028,884.61 | 17,232,601.43 | 50,927.07 | 6,778,497.90 | 53,090,911.01 |
| 1924 | 37,856,788.34 | 3,168,419.75 | 18,210,673.83 | | 59,235,881.92 | 25,000,000.00 | | 4,462,895.71 | 19,361,937.09 | 59,927.07 | 10,351,122.05 | 59,235,881.92 |
| 1925 | 43,971,823.88 | 3,166,447.52 | 16,446,173.04 | | 63,584,444.14 | 25,000,000.00 | | 4,489,811.06 | 21,659,198.68 | 75,000.00 | 12,360,434.70 | 63,584,444.44 |
| 1926 | 47,163,989.87 | 3,152,311.67 | 16,024,123.31 | | 66,340,424.85 | 26,600,000.00 | | 4,583,279.81 | 24,651,842.19 | 175,000.00 | 10,330,302.85 | 66,340,424.85 |
| 1927 | 48,762,083.87 | 3,063,321.59 | 15,427,852.56 | | 67,251,318.02 | 26,600,000.00 | | 3,368,550.73 | 27,035,550.98 | 246,000.00 | 10,001,216.31 | 67,251,318.02 |
| 1928 | 48,547,517.85 | 3,029,559.55 | 17,129,598.08 | | 68,706,675.48 | 26,600,000.00 | | 3,497,474.00 | 29,247,857.89 | 318,460.80 | 9,042,882.72 | 68,706,675.48 |
| 1929 | 52,192,633.05 | 2,530,583.30 | 18,754,365.08 | | 73,477,581.43 | 27,969,300.00 | | 3,644,290.84 | 31,868,879.61 | 577,860.80 | 9,417,250.18 | 73,477,581.43 |
| 1930 | 53,009,419.06 | 2,529,534.39 | 18,164,965.11 | | 73,703,918.56 | 27,969,300.00 | | 3,628,426.09 | 34,181,820.85 | 1,172,140.64 | 6,752,230.98 | 73,703,918.56 |
| 1931 | 52,779,248.43 | 2,529,534.31 | 17,243,441.78 | | 72,552,224.52 | 27,969,300.00 | | 2,967,286.11 | 36,351,575.12 | 3,443,430.04 | 1,820,633.25 | 72,552,224.52 |
| 1932 | 52,412,243.97 | 2,529,534.23 | 13,361,704.66 | | 68,303,482.86 | 27,969,300.00 | | 1,752,439.09 | 38,368,467.63 | 16,987.58 | 196,288.56 | 68,303,482.86 |
| 1933 | 52,190,644.72 | 2,671,456.36 | 15,899,213.52 | 10,177.30 | 70,771,492.10 | 27,969,300.00 | | 2,074,598.47 | 40,153,837.78 | 21,728.30 | 552,027.55 | 70,771,492.10 |
| 1934 | 54,453,548.35 | 2,638,844.36 | 15,995,207.84 | 13,826.43 | 73,101,426.98 | 27,969,300.00 | 1,046,000.00 | 2,835,353.08 | 35,142,262.89 | 47,594.13 | 6,060,916.88 | 73,101,426.98 |
| 1935 | 54,312,172.68 | 2,370,390.38 | 15,536,720.65 | 12,016.85 | 72,231,309.56 | 27,969,300.00 | 284,000.00 | 2,802,112.20 | 36,703,400.64 | 53,318.42 | 4,419,109.30 | 72,231,306.56 |
| 1936 | 56,106,042.67 | 1,974,694.66 | 16,961,931.43 | 6,547.23 | 75,049,215.99 | 27,969,300.00 | 22,000.00 | 3,052,318.48 | 38,252,028.30 | 65,050.00 | 5,688,519.21 | 75,049,215.99 |
| 1937 | 56,536,085.25 | 1,985,629.54 | 18,215,284.15 | 2,046.63 | 76,739,045.57 | 27,969,300.00 | 10,000.00 | 2,454,490.18 | 39,693,097.14 | 57,461.44 | 6,554,696.81 | 76,739,045.57 |
| 1938 | 56,649,798.58 | 3,796,362.25 | 15,460,687.85 | 2,002.28 | 75,911,850.96 | 27,969,300.00 | | 1,971,351.32 | 40,714,018.58 | 63,073.29 | 5,194,107.77 | 75,911,850.96 |
| 1939 | 64,250,654.67 | 247,608.60 | 17,379,109.92 | 160,371.45 | 82,037,744.64 | 27,969,300.00 | | 2,700,722.62 | 46,041,154.81 | 73,077.45 | 5,253,489.76 | 82,037,744.64 |
| 1940 | 65,193,286.63 | 244,648.98 | 21,117,079.86 | 58,233.77 | 86,613,249.24 | 27,969,300.00 | | 3,739,671.51 | 46,654,690.71 | 90,416.16 | 8,159,170.86 | 86,613,249.24 |

[1] Prior to 1934, certain reserves, such as uncollectible accounts, etc., are netted against the corresponding asset account.

[2] Long term advances, etc., 1902 to 1907, inclusive, represent advances from associated company, liquidated by issuance of capital stock; 1934 to 1936, inclusive, represent notes issued for purchase of property, etc.

*Italic figures* denote deficit.

## EXHIBIT NO. 40.—STIPULATION THAT HOPE NATURAL GAS COMPANY IS A NATURAL GAS COMPANY UNDER THE NATURAL GAS ACT

### STIPULATION

It is stipulated by counsel for the Hope Natural Gas Company and counsel for the Federal Power Commission that the Hope Natural Gas Company is a natural-gas company within the meaning of section 2 (6) of the Natural Gas Act, which provides: "'Natural-gas company' means a person engaged in the transportation of natural gas in interstate commerce, or the sale in interstate commerce of such gas for resale."

/s/ WILLIAM B. COCKLEY,
*Counsel for Hope Natural Gas Company.*
/s/ RICHARD J. CONNOR,
/s/ MILFORD SPRINGER,
*Counsel for Federal Power Commission.*

Date: March 3, 1941.
Approved:

/s/ SPENCER W. REEDER,
*Counsel for Cleveland.*
/s/ SAMUEL G. MILLER,
*Counsel for Pennsylvania Public Utility Commission.*

10 **EXHIBIT NO. 11.—BALANCE SHEET, INCOME ACCOUNT, ANALYSIS OF PROFIT AND LOSS—SURPLUS, YEAR ENDED DEC. 31, 1938, COMPARATIVE FOR YEARS 1929 TO 1938, INCLUSIVE, HOPE WITNESS CHISLER**

[Pages 1 to 9 omitted]

HOPE NATURAL GAS COMPANY

*Balance sheet per company's books as of Dec. 31, 1938*

| W. Va. P. S. C. Account No. | ASSETS AND OTHER DEBITS | |
|---|---|---|
| 101 | Fixed capital: | |
| | Production system property | $26,072,494.77 |
| | Transmission system property | 25,253,484.00 |
| | Distribution system property | 2,795,083.04 |
| | General property | 1,980,813.68 |
| | Unfinished construction | 81,392.75 |
| | Undistributed intangible fixed capital: | |
| | Franchises | 5,811.64 |
| | Patent rights and licenses | 458.66 |
| | Contracts for gas | 23,915.61 |
| | Total fixed capital | 56,213,454.15 |
| 102 | Investments in other physical property: | |
| | Coal property | 341,529.68 |
| | Property appreciation account (C. L. & H. Co.) | 94,814.75 |
| | Surplus property available for sale | 132,624.97 |
| | Total investments in other physical property | 568,969.40 |
| 111 | Cash: | |
| | Cash in banks and on hand | 534,588.16 |
| | Disbursing agents and returned checks | 9,226.52 |
| | Total cash | 543,814.68 |
| 112 | Notes receivable: | |
| | Customers and others | 5,711.68 |
| | Officers and employees | 788.37 |
| | Total notes receivable | 6,500.05 |

*Balance sheet per company's books as of Dec. 31, 1938*—Continued

| W. Va. P. S. C. Account No. | ASSETS AND OTHER DEBITS—continued | |
|---|---|---|
| 113 | Accounts receivable: | |
| | Gas, shop, and store ledgers | $259,977.64 |
| | Special gas sales contract accounts | 129,298.31 |
| | Loans to affiliated companies | 521,983.45 |
| | Current affiliated company accounts | 1,355,084.66 |
| | Other | 64,304.26 |
| | Total accounts receivable | 2,330,648.32 |
| 114 | Interest and dividends receivable: | |
| | Government securities | 40,883.05 |
| | Notes | 28.35 |
| | Total interest and dividends receivable | 40,911.40 |
| 115 | Marketable securities: | |
| | Government bonds | 11,033,593.76 |
| 116 | Materials and supplies: | |
| | Warehouse accounts | 1,400,452.32 |
| | Store and shop merchandise | 16,911.13 |
| | Material loaned and repairing account | 13.00 |
| | Total materials and supplies | 1,417,376.45 |
| 117 | Prepayments: | |
| | Taxes | 12,700.00 |
| | Licenses | 1,905.59 |
| | Insurances | 12,880.59 |
| | Rentals and royalties (other than oil or gas) | 1,380.69 |
| | Total prepayments | 28,866.87 |
| 121 | Investments in affiliated companies: | |
| | Reserve Gas Company | 3,547,442.50 |
| | Gas Companies, Inc | 5,000.00 |
| | Total investments in affiliated companies | 3,552,442.50 |
| 122 | Miscellaneous investments: | |
| | Citizens Telephone Company | 10.00 |
| | The Union National Bank, Clarksburg, W. Va | 2,400.00 |
| | Total miscellaneous investments | 2,410.00 |
| 125 | Miscellaneous special funds: | |
| | Government securities accepted as security by Workmen's Compensation Commission of West Virginia | 75,960.94 |
| | Advance premiums paid to Workmen's Compensation Commission of West Virginia | 276.51 |
| | Total miscellaneous special funds | 76,237.45 |

*Balance sheet per company's books as of Dec. 31, 1938*—Continued

| W. Va. P. S. C. Account No. | ASSETS AND OTHER DEBITS—continued | |
|---|---|---|
| 135 | Work in progress: | |
| | Incomplete jobs | $871.48 |
| | Public road suspense account | 257.59 |
| | Store suspense account | 583.94 |
| | Well suspense account | 143.20 |
| | Mannington district office suspense account | 38.55 |
| | Total work in progress | 1,894.76 |
| 136 | Miscellaneous suspense: | |
| | State unemployment compensation tax | 2,248.01 |
| | Other prepaid and deferred charges | 1,041.26 |
| | Total miscellaneous suspense | 3,289.27 |
| | Total assets and other debits | 75,820,409.06 |
| | LIABILITIES AND OTHER CREDITS | |
| 201 | Capital stock: | |
| | Authorized—$35,000,000 divided into 350,000 shares, $100 par value. | |
| | Issued and outstanding—279,693 shares | $27,969,300.00 |
| 222 | Accounts payable: | |
| | Vouchers | 100,426.99 |
| | Rentals | 71,693.65 |
| | Pay rolls | 176,448.26 |
| | Gas purchased | 791,385.99 |
| | Accident benefits | 80,170.35 |
| | Intercompany accounts payable | 26,654.54 |
| | Other | 36,449.48 |
| | Total accounts payable | 1,283,229.26 |
| 223 | Customer's deposits: | |
| | Security deposits | 89,005.00 |
| | Drillers and pumpers | 1,646.03 |
| | Unclaimed | 228.73 |
| | Total customer's deposits | 90,879.76 |
| 227 | Miscellaneous current liabilities: | |
| | Unpaid gas royalty account | 14.72 |
| 231 | Taxes accrued: | |
| | Federal income | 10,000.00 |
| | Other | 479,286.38 |
| | Total taxes accrued | 489,286.38 |
| 232 | Interest accrued: | |
| | Security deposits | 4,691.53 |
| 233 | Miscellaneous accrued liabilities: | |
| | Accrued rentals payable | 330.79 |
| | Accrued royalties payable | 11,476.98 |
| | Total miscellaneous accrued liabilities | 11,807.77 |

*Balance sheet per company's books as of Dec. 31, 1938*—Continued

| W. Va. P. S. C. Account No. | LIABILITIES AND OTHER CREDITS—continued | |
|---|---|---|
| 251 | Retirement and depletion reserve: | |
| | Production system property | $19,451,498.20 |
| | Transmission system property | 18,517,649.71 |
| | Distribution system property | 1,306,166.86 |
| | General property | 1,354,432.54 |
| | Contracts for gas | 813.44 |
| | Cost of abandoning property | 3,001.58 |
| | Total retirement and depletion reserve | 40,633,562.33 |
| 255 | Contributions for extensions: | |
| | Contributions in aid of construction | 540.87 |
| 257 | Miscellaneous reserves: | |
| | Property appreciation (C. L. & H. Co.) | 45,431.90 |
| | Surplus property available for sale | 80,456.25 |
| | Doubtful accounts receivable | 10,600.00 |
| | Doubtful notes receivable | 100.00 |
| | Accounts in closed banks | 3,232.63 |
| | Total miscellaneous reserves | 139,820.78 |
| 261 | Miscellaneous unadjusted credits: | |
| | Store earning suspense account | 3,117.89 |
| | Deposit by consumer for line extension | 50.00 |
| | Total miscellaneous unadjusted credits | 3,167.89 |
| 270 | Profit and loss—surplus | 5,194,107.77 |
| | Total liabilities and other credits | 75,820,409.06 |

[Pages 11 to 21 omitted.]

1 **EXHIBIT NO. 57.—ORIGINAL COST OF GAS PLANT AS AT DEC. 31, 1938, VOLUME I, F. P. C. WITNESSES SMITH, BAKER, DUNN, AND PACE**

## WRITTEN STATEMENT

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices, or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Natural Gas Company has been made, and, as a result, this report on the original cost of the Gas Plant of the Company is submitted.

This report is in two parts. Volume I sets forth the investment of Hope Natural Gas Company in Gas Plant per Company books and as adjusted, as of December 31, 1938. The adjusted figures show the original cost as defined in the Federal Power Commission's Uniform System of Accounts for Natural Gas Companies of the gas plant. Volume II contains a detailed explanation of the staff adjustments.

On January 1, 1939, there became effective and applicable to the Company a new Uniform System of Accounts for Gas Utilities prescribed by the Public Service Commission of West Virginia. In July 1938 the Company began an investigation and study of its records for the purpose of stating in its Gas Plant Accounts the cost of its properties and to reflect the amount of such cost in each primary account as prescribed by said Commission.

2 The results of this investigation and study made by the Company, were made available to the accountants of the Federal Power Commission during May 1940. An inventory of the existing property at December 31, 1938, was made by the Company and priced at what the Company claims was original cost. The results of this inventory, among other things, necessitated numerous reclassifications of costs, adjustment of prior distribution of certain costs and correction of certain accounting errors, all of which have been examined by the Commission's staff of accountants.

There is presented immediately hereinafter a condensed balance sheet of the Company as reflected by the books of account at December 31, 1938, before any adjustments, in order to set forth the capitalized cost of Gas Plant per books on that date:

3 ASSETS

| | Amount |
|---|---|
| Gas plant: | |
| Gas plant in service | $56,101,875.49 |
| Construction work in progress | 81,392.75 |
| Gas plant adjustment | 94,814.75 |
| Coal property | 341,529.68 |
| Franchises, patent rights, and other intangibles | 30,185.91 |
| Total gas plant | $56,649,798.58 |
| Investment and fund accounts | 3,796,362.25 |
| Current and accrued assets | 15,460,687.85 |
| Deferred debits | 5,002.28 |
| Total assets and other debits | $75,911,850.96 |

LIABILITIES

| | |
|---|---|
| Capital stock | $27,969,300.00 |
| Current and accrued liabilities | 1,971,351.32 |
| Deferred credits | 3,167.89 |
| Contributions in aid of construction | 540.87 |
| Reserves: | |
| Depreciation and depletion—Utility plant | 40,759,450.48 |
| Other | 13,982.63 |
| Surplus—Earned | 5,194,107.77 |
| Total liabilities and other credits | $75,911,850.96 |

4 As shown on the preceding balance sheet, the Capitalized Cost of Gas Plant as of December 31, 1938, was $56,649,798.58, of which $56,101,875.49 represented Gas Plant in Service, summarized by functions as follows:

| | |
|---|---|
| Production plant | $26,460,050.10 |
| Transmission plant | 25,253,484.00 |
| Distribution plant | 2,795,083.04 |
| General plant | 1,593,258.35 |
| Total | 56,101,875.49 |

This report deals with the cost of the production plant, transmission plant, and general plant although a cursory examination was made of the distribution plant. The following summary sets forth the cost per Company books, reclassified by the Company as

shown by Schedule I, Page 10, of this report, and as adjusted by the examiners:

| Particulars | Cost per books | Examiners' adjustments | As adjusted |
|---|---|---|---|
| Production plant | $26,718,065.06 | *$184,673.83* | $26,333,391.23 |
| Transmission plant | 25,279,965.69 | *1,414,567.34* | 23,865,398.35 |
| General plant | 1,308,761.70 | *299,930.64* | 1,008,831.06 |
| Total | 53,306,792.45 | *2,099,171.81* | 51,207,620.64 |

Italic figures denote decrease.

Schedule I of this report sets forth the total cost of Gas Plant in Service per Company books, Company's reclassification adjustments, Examiners' (F. P. C. staff) adjustments and the resulting adjusted balances, representing original cost as defined in the Commission's System of Accounts.

This schedule has been constructed to show separately the total cost of the production plant, transmission plant, and general plant, representing the cost dealt with in this report. The total cost per books, in this respect, of $53,306,792.45, corresponds with that shown by Exhibit 20, page 32, column 4.

Attention is called to the total examiners' adjustments of $2,099,171.81, representing a credit to the total capitalized cost of Gas Plant in Service, exclusive of distribution plant. This amount represents the net adjustment made by the examiners and is arrived at by the difference between credit adjustments, amounting to $5,883,085.12 and debit adjustments of $3,783,913.31, and is summarized by classes as follows:

| *Description* | *Amount* |
|---|---|
| Company adjustments per Exhibit 20 | *$1,804,383.48* |
| Company adjustments—Prior utility acquisitions | *232,930.69* |
| Correction of accounting errors | 1,480,227.70 |
| Transfers to accounts other than gas plant in service | *1,542,085.34* |
| Examiners' adjustment—Net credit | *2,099,171.81* |

Schedule 1-A sets forth all adjustments by sources, showing contra accounts involved. It also identifies the adjusting journal entries which are given in Volume II.

The total original cost of Gas Plant in Service, exclusive of distribution plant, at December 31, 1938, is summarized in the following tabulation which shows separately acquisitions of properties classed as operating units or systems.

| | | |
|---|---|---|
| Company constructed and purchased from nonutilities: | | |
| Cost per books | $50,088,393.17 | |
| Adjustments | *1,866,241.12* | |
| As adjusted | | $48,222,152.05 |
| 6 Acquisitions of prior utilities: | | |
| Cost per books | $3,218,399.28 | |
| Adjustments | *232,930.69* | |
| As adjusted | | $2,985,468.59 |
| Total as adjusted—Dec. 31, 1938 | | 51,207,620.64 |

The above tabulation has been made to focus attention on properties acquired from prior utilities. As shown above and also by Exhibit 20, page 32, column 12, the cost capitalized per Company books for this class of acquisitions is $3,218,399.28. By repricing these same properties, the Company arrives at a cost of $4,639,010.78, as shown by Exhibit 20, page 32, column 13. This repricing would result in an increase in cost recorded in plant accounts of $1,420,611.50. The Company adjustments or repricing are not concurred in. The only adjustment to this class of property approved by the examiners are shown in the above tabulation ($232,930.69). They represent Company adjustments to reclassify capitalized cost and correct accounting errors.

An analysis of approximately ninety percent of such acquisitions and a careful examination of all vouchers, books and data available, together with consideration of each individual acquisition, lead to the conclusion there is no justification for any adjustments whereby the amounts now recorded in plant accounts would be increased. It is the opinion of the examiners that the amount recorded at the time of acquisition represent the original cost as near as can be determined.

7 The total proposed adjustment to this class of property, developed by the original cost study made by the Company, included a credit of $967,151.87, classified as follows:

| | |
|---|---|
| Credit plant accounts—Accrued depreciation | *$746,851.51* |
| Estimated costs of obtaining | 10,917.50 |
| Estimated costs of construction | 1,712.83 |
| Correction of accounting errors | *232,930.69* |
| Total | *967,151.87* |

Of the above proposed adjustments, the examiners have approved only the correction of accounting errors representing a credit to Capitalized Cost of $232,930.69.

Schedules 2 to 33, inclusive, set forth the investment in gas plant, exclusive of distribution plant, by accounts, showing the cost per books, staff adjustments, and the adjusted or original cost balances. These schedules are the result of a detailed examination made by the Commission's staff of accounts of the books, records, and documents of the Company, including the Company's Original Cost study. The adjustments include the reclassification of items shown in Schedule 1.

Schedule No. 34 is a summary of amounts transferred to Account 100.4, Gas Plant Held for Future Use, of the Commission's Uniform System of Accounts.

Schedule No. 35 is a statement of Account 107, Gas Plant Adjustments, showing the source of data and manner of determining amounts by the Company.

Schedule No. 36 is a statement of Investment in Coal Property. This investment was included in Gas Plant as of December 31, 1938, by the Company, although not included as a part of the
8 original cost claimed per Exhibit 20. No adjusting entry has been proposed by the Company to transfer this cost to other accounts. This item has been eliminated from Gas Plant by the examiners and transferred to Account 110, Other Physical Property, by Balance Sheet Journal Entry No. 100.

Schedule No. 37 is a summary of an account designated by the Company as "Franchises, Patent Rights, and Other Intangibles" and was included in Gas Plant as of December 31, 1938. An analysis of this account discloses that it consists of three items as follows:

| | |
|---|---|
| Patent rights: | |
| Thermo-syphon system for gasoline absorption plant | $458.66 |
| Contracts and franchises: | |
| Acquired in acquisition of Clarksburg Light and Heat Co. | 5,811.64 |
| Contract for gas: | |
| Hamilton Gas Corporation | 23,915.61 |
| Total | 30,185.91 |

The first two items shown above have been eliminated from Gas Plant by the Examiners and charged to Surplus by Balance Sheet Journal Entry No. 101.

The third item has also been eliminated from Gas Plant and transferred to Account 146, Other Deferred Debits, by Balance Sheet Journal Entry No. 101.

9 Volume II of this report, as stated hereinbefore, deals with adjustments made by the examiners and includes a summary of all adjustments, together with adjusting journal entries and a detailed explanation of each.

JOHN W. PACE,
John W. Pace,
*Senior Examiner of Accounts.*
EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

CLARKSBURG, WEST VIRGINIA, *February 20, 1941.*

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*
CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

## HOPE NATURAL GAS COMPANY—Continued

*Investment in gas plant per books and as adjusted as at Dec. 31, 1938*

| Schedule No. | Account No. | Description | Cost per books | Reclassification by company | | Cost per books reclassified | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Dr. | Cr. | | Dr. | Cr | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| | | *Natural gas production plant* | | | | | | | |
| 2 | 330.1 | Natural gas producing lands | | $3,319.84 | | $3,319.84 | | | $3,319.84 |
| | 330.2 | Natural gas producing leaseholds: | | | | | | | |
| 3 | | Operated | $1,331,100.55 | | | 1,331,100.55 | $267,904.31 | | 1,599,004.86 |
| 4 | | Unoperated | 479,570.75 | | | 479,570.75 | 104,811.48 | $584,382.23 | |
| 5 | 330.4 | Rights of way | 530,476.17 | 9,412.94 | $8,978.33 | 530,910.78 | 181,930.98 | 67,450.29 | 645,391.47 |
| 6 | 330.5 | Other land and land rights | 23,729.28 | 8,866.78 | 7,993.90 | 24,602.16 | | 3,593.64 | 21,008.52 |
| 7 | 331.2 | Field measuring and regulating station structures | 30,244.11 | 3,894.08 | 5,520.62 | 28,617.57 | 651.94 | 8,130.59 | 21,138.92 |
| 8 | 331.3 | Other production system structures | 177,682.39 | 65,418.75 | 29,937.20 | 213,163.94 | 5,691.31 | 27,666.44 | 191,188.81 |
| 9 | 332.1 | Producing gas wells—Well construction | 4,370,612.79 | | 3,679.04 | 4,366,933.75 | 391,689.83 | 669,145.87 | 4,089,477.71 |
| 10 | 332.2 | Producing gas wells—Well equipment | 7,893,605.30 | | 8,023.71 | 7,885,581.59 | 8,078.12 | 283,149.96 | 7,610,509.75 |
| | | Field lines: | | | | | | | |
| 11 | 333.11 | Construction | 3,040,755.47 | 35,999.16 | 38,233.64 | 3,038,520.99 | 921,753.13 | 337,784.54 | 3,622,489.58 |
| 12 | 333.12 | Equipment | 7,950,541.90 | 29,637.87 | 13,137.24 | 7,967,042.53 | 317,703.03 | 610,493.74 | 7,674,251.82 |
| 13 | 333.2 | Field measuring and regulating station equipment | 244,176.06 | 15,753.87 | | 259,929.93 | 6,734.51 | 82,279.41 | 184,385.03 |
| 14 | 334 | Drilling and cleaning equipment | 387,555.33 | 156,184.60 | | 543,739.93 | 52,752.85 | 800.07 | 595,692.71 |
| 15 | 337 | Other production equipment | | 45,030.75 | | 45,030.75 | 31,758.09 | 1,256.63 | 75,532.21 |
| | | Total gas production plant | 26,460,650.10 | 373,518.64 | 115,503.68 | 26,718,065.06 | 2,291,459.58 | 2,676,133.41 | 26,333,391.23 |



4880—12—3

*Investment in gas plant per books and as adjusted as at Dec. 31, 1938*—Continued

| Schedule No. | Account No. | Description | Cost per books | Reclassification by company | | Cost per books reclassified | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Dr. | Cr. | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| | | *Transmission plant* | | | | | | | |
| 16 | 351.12 | Land | $152,660.05 | $13,624.99 | $5,163.97 | $161,121.07 | $7,116.64 | $5,325.50 | $162,912.21 |
| 20 | 351.23 | Rights of way | 551,354.41 | 697.91 | 56,331.85 | 495,720.47 | 52,298.61 | 156,776.39 | 391,242.69 |
| 17 | 352.2 | Compressor station structures | 1,760,317.25 | 489,844.60 | 539,885.67 | 1,710,276.18 | 102,623.88 | 371,017.68 | 1,441,882.38 |
| 18 | 352.3 | Measuring and regulating station structures | 6,305.15 | 5,873.14 | 779.79 | 11,398.50 | 151.55 | 3,342.84 | 8,207.21 |
| 19 | 352.4 | Other transmission system structures | 6,709.29 | 997.85 | 359.03 | 7,348.11 | | 5 72.42 | 6,775.69 |
| 20 | 353 | Mains | 14,614,229.98 | 286,750.65 | 292,513.14 | 14,618,467.49 | 556,162.13 | 1,042,554.90 | 14,132,074.72 |
| 21 | 354.2 | Compressor station equipment | 8,135,673.87 | 273,378.24 | 178,069.38 | 8,230,982.73 | 684,614.14 | 1,231,924.88 | 7,683,671.99 |
| 22 | 354.3 | Measuring and regulating station equipment | 26,234.00 | 5,190.65 | 1,961.90 | 29,462.75 | 3,044.23 | 14,891.07 | 17,615.91 |
| 23 | 354.4 | Other transmission system equipment | | 15,188.39 | | 15,188.39 | 5,827.16 | | 21,015.55 |
| | | Total transmission plant | 25,253,484.00 | 1,101,546.42 | 1,075,064.73 | 25,279,965.69 | 1,411,838.34 | 2,826,605.68 | 23,865,398.35 |
| | | *General plant* | | | | | | | |
| 24 | 370 | Land and land rights | 154,590.82 | 43.13 | 27,956.22 | 126,677.73 | 7,202.00 | 36,898.52 | 96,981.21 |
| 25 | 371 | Structures and improvements | 262,605.30 | 26,385.90 | 51,667.86 | 237,323.34 | 2,176.81 | 14,612.37 | 225,887.78 |
| 26 | 372 | Office furniture and equipment | 239,989.32 | | | 239,989.32 | 13,516.77 | 74,822.75 | 178,683.34 |
| 27 | 373 | Transportation equipment | 211,115.41 | 3,951.90 | 53,636.30 | 161,431.01 | 2,779.07 | 21,895.59 | 142,314.49 |
| 28 | 374 | Stores equipment | | 3,321.00 | | 3,321.00 | 1,889.30 | 203.74 | 5,106.76 |
| 29 | 375 | Shop equipment | | 63,168.92 | | 63,168.92 | 43,106.82 | 2,960.57 | 104,185.17 |
| 30 | 376 | Laboratory equipment | | 1,003.40 | | 1,003.40 | | | 1,003.40 |
| 31 | 377 | Tools and work equipment | 449,871.11 | | 249,110.52 | 200,760.59 | 9,319.42 | 205,534.68 | 4,545.33 |
| 32 | 378 | Communication equipment | 254,602.17 | | | 254,602.17 | | 5,626.43 | 248,975.74 |
| 33 | 379 | Miscellaneous equipment | 20,484.22 | | | 20,484.22 | 525.00 | 19,861.38 | 1,147.84 |
| | | Total general plant | 1,593,258.35 | 97,874.25 | 382,370.90 | 1,308,761.70 | 80,615.39 | 380,546.03 | 1,008,831.06 |
| | | Total, gas plant (exclusive of distribution | 53,306,792.45 | 1,572,939.31 | 1,572,939.31 | 53,306,792.45 | 3,783,913.31 | 5,883,065.12 | 51,207,640.64 |

Schedule No. 1-A

## HOPE NATURAL GAS COMPANY

*Summary of examiners' journal entries adjusting plant accounts showing types of adjustments and contra accounts affected*

| F. E. No. | Description | Company's adjustments per original cost study (exhibit 20) | Total examiners' adjustments | | | | 100-4 | 110 | 100.3 | 144 | 250-1 | 250-2 | 250-3 | 271 | Distribution plant |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Company's adjustments to prior utility purchases | | Examiners' other adjustments | Total examiners' adjustments | Utility plant held for future use | Other physical property | Construction work in progress | Retirement work in progress | Reserve for depreciation of utility plant | Reserve for amortization and depletion of producing natural gas lands and land rights | Reserve for abandoned leases | Earned surplus | |
| | | | A. J. E. No. | Amount | | | | | | | | | | | |
| | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) |
| | *Company adjustments accepted by examiners* | | | | | | | | | | | | | | |
| 300 | Transfers to and from utility plant in service accounts: | | | | | | | | | | | | | | |
| | Debits | $466,187.96 | | | | | | | | | | | | | |
| | Credits | 466,187.96 | | | | | | | | | | | | | |
| 301 | Adjustments to agree with adopted inventory | $179,769.12 | 326 | $8,227.19 | | $187,996.31 | | | | | $187,996.31 | | | | |
| 302 | Capitalized structures or materials removed | 269,273.27 | 327 | 6,831.43 | | 275,104.70 | | | | | 275,104.70 | | | | |
| 303 | Depreciation on purchased property | 412,186.80 | | | | 412,186.80 | | | | 0 | 412,186.80 | | | | |
| 304 | Abandoned—Still on books | 78,905.51 | 329 | 20,336.25 | | 99,241.76 | | | | $99,241.76 | | | | | |
| 305 | Items on books found in storage | 37,464.60 | | | | 37,464.60 | | 325.75 | | 37,438.85 | | | | | |
| 306 | Transfers to and from other than utility plant in service accounts | 211,080.04 | | | | 211,080.04 | $13,967.21 | 55,505.81 | | 141,607.02 | | | | | |
| 307 | Adjustments of vouchers M-600 and A-155 estimates | 158,767.75 | 331 | 67,101.74 | | 225,869.49 | | | | | 225,869.49 | | | | |
| 308 | Voucher charges to investment not in ledger | 69,559.52 | | | | 69,559.52 | | | | | | | | $69,559.52 | |
| 309 | Correction of voucher amounts and records | 53,805.31 | 332 | 48,145.03 | | 5,660.28 | | | | | | | | 5,660.28 | |
| 310 | Estimated cost of obtaining | 11,814.46 | | | | 11,814.46 | | | | | | | | 11,814.46 | |
| 311 | Recording costs—From original papers | 5,719.50 | | | | 5,719.50 | | | | | | | | 5,719.50 | |
| 312 | Damages due to maintenance | 8,402.38 | | | | 8,402.38 | | | | | | | | 8,402.38 | |
| 313 | Removal of amounts shown on books—No equipment added at correspond[illegible] time, repairs, or could not identify charges on vouchers | 11,284.41 | | | | 11,284.41 | | | | | | | | 11,284.41 | |
| 314 | Improper charges and credits | 51,003.29 | 333 | 1.00 | | 51,002.29 | | | | | 51,003.29 | | | 1.00 | |
| 315 | To restore original cost | 38,992.16 | | | | 38,992.16 | | | | | 38,992.16 | | | | |
| 316 | Repairs and replacements | 79,832.19 | | | | 79,832.19 | | | | | | | | 79,832.19 | |
| 317 | Fleet owners and quantity discounts | 2,227.40 | | | | 2,227.40 | | | | | | | | 2,227.40 | |
| 318 | Unproductive drilling deeper | 72,473.08 | | | | 72,473.08 | | | | | | | | 72,473.08 | |
| 319 | Removal of rig charges | 429,707.12 | | | | 429,707.12 | | | | | 429,707.12 | | | | |
| 319 | Arbitrary rig charges added | 391,230.00 | | | | 391,230.00 | | | | | 391,230.00 | | | | |
| 320 | Retirement of well construction—Change of well equipment | 12,576.26 | | | | 12,576.26 | | | | | 12,576.26 | | | | |
| 321 | Adjustment for lines taken up | 344,350.43 | 334 | 24,457.94 | | 368,808.37 | | | | | 368,808.37 | | | | |
| 322 | Unretired labor | 263,977.16 | | | | 263,977.16 | | | | | 263,977.16 | | | | |
| 323 | Transfer to distribution system | 19,678.07 | | | | 19,678.07 | | | | | | | | | $19,678.07 |
| 324 | To balance with books | 167,236.40 | 335 | 57,953.77 | | 109,282.63 | | | | | 248,281.03 | ($352,752.18) | $104,811.58 | | |
| 325 | Miscellaneous small adjustments | 1,588.48 | | | | 1,588.48 | | | | | 1,588.48 | | | | |
| | Transfers to and from utility plant in service accounts: | | | | | | | | | | | | | | |
| | Debits | $8,797.21 | | | | | | | | | | | | | |
| | Credits | 8,797.21 | 328 | | | | | | | | | | | | |
| | Abandoned lines not removed | | 330 | 1,076.34 | | 1,076.34 | | | | 1,076.34 | | | | | |
| | *Examiners' adjustments* | | | | | | | | | | | | | | |
| 326 | To reinstate construction costs expensed | | | | $1,480,227.70 | 1,480,227.70 | | | | | | | | 1,480,227.70 | |
| 327 | To transfer adjusted cost of property used to transport coke oven gas | | | | 762,592.06 | 762,592.06 | | 762,592.06 | | | | | | | |
| 328 | To transfer to "Utility Plant Held For Future Use," the adjusted cost of field lines connected to nonproducing wells | | | | 21,126.61 | 21,126.61 | 21,126.61 | | | | | | | | |
| 329 | To realize depreciation on retirements of prior utility property | | | | 3,106.27 | 3,106.27 | | | | | 3,106.27 | | | | |
| 330 | To transfer to "Other Physical Property," cost of sites formerly used for compressing stations | | | | 901.30 | 901.30 | | 901.30 | | | | | | | |

| | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Company adjustments accepted by examiners* | | | | | | | | | | | | | | |
| 00 | Transfers to and from utility plant in service accounts: | | | | | | | | | | | | | | |
| | Debits | $466,187.96 | | | | | | | | | | | | | |
| | Credits | *466,187.96* | | | | | | | | | | | | | |
| 01 | Adjustments to agree with adopted inventory | *$179,769.12* | 326 | *$8,227.19* | | *$187,996.31* | | | | | $187,996.31 | | | | |
| 02 | Capitalized structures or materials removed | *269,275.27* | 327 | *5,831.43* | | *275,104.70* | | | | | 275,104.70 | | | | |
| 03 | Depreciation on purchased property | *412,186.80* | | | | *412,186.80* | | | | | 412,186.80 | | | | |
| 04 | Abandoned—Still on books | *78,905.51* | 329 | *20,336.25* | | *99,241.76* | | | | $99,241.76 | | | | | |
| 05 | Items on books found in storage | *37,464.60* | | | | *37,464.60* | | $25.75 | | 37,438.85 | | | | | |
| 06 | Transfers to and from other than utility plant in service accounts | *211,080.04* | | | | *211,080.04* | $13,967.21 | 55,505.81 | | 141,607.02 | | | | | |
| 07 | Adjustments of vouchers M-699 and A-155 estimates | *158,767.75* | 331 | *67,101.74* | | *225,869.49* | | | | | 225,869.49 | | | | |
| 08 | Voucher charges to investment not in ledger | *69,559.52* | | | | *69,559.52* | | | | | | | | *$69,559.52* | |
| 09 | Correction of voucher amounts and records | *53,805.31* | 332 | *48,145.03* | | *5,660.28* | | | | | | | | *5,660.28* | |
| 10 | Estimated cost of obtaining | *11,814.46* | | | | *11,814.46* | | | | | | | | *11,814.46* | |
| 11 | Recording costs—From original papers | *5,719.50* | | | | *5,719.50* | | | | | | | | *5,719.50* | |
| 12 | Damages due to maintenance | *8,402.43* | | | | *8,402.43* | | | | | | | | *8,402.43* | |
| 13 | Removal of amounts shown on books—No equipment added at corresponding time, repairs, or could not identify charges on vouchers | *11,284.41* | | | | *11,284.41* | | | | | | | | 11,284.41 | |
| 14 | Improper charges and credits | *51,003.29* | 333 | *1.00* | | *51,002.29* | | | | | *51,003.29* | | | *1.00* | |
| 15 | To restore original cost | *38,992.16* | | | | *38,992.16* | | | | | *38,992.16* | | | | |
| 16 | Repairs and replacements | *79,832.19* | | | | *79,832.19* | | | | | | | | 79,832.19 | |
| 17 | Fleet owners and quantity discounts | *2,227.40* | | | | *2,227.40* | | | | | | | | 2,227.40 | |
| 18 | Unproductive drilling deeper | *72,473.08* | | | | *72,473.08* | | | | | | | | 72,473.08 | |
| 19 | Removal of rig charges | *429,707.12* | | | | *429,707.12* | | | | | 429,707.12 | | | | |
| 19 | Arbitrary rig charges added | 391,230.00 | | | | 391,230.00 | | | | | 391,230.00 | | | | |
| 20 | Retirement of well construction—Change of well equipment | *12,576.26* | | | | *12,576.26* | | | | | 12,576.26 | | | | |
| 21 | Adjustment for lines taken up | *344,550.43* | 334 | *24,257.94* | | *368,808.37* | | | | | 368,808.37 | | | | |
| 22 | Unretired labor | *263,977.16* | | | | *263,977.16* | | | | | 263,977.16 | | | | |
| 23 | Transfer to distribution system | *19,678.07* | | | | *19,678.07* | | | | | | | | | $19,678.07 |
| 24 | To balance with books | 167,236.40 | 335 | *57,953.77* | | 109,282.63 | | | | | 248,281.03 | *$252,752.18* | *$104,811.48* | | |
| 25 | Miscellaneous small adjustments | *1,588.48* | | | | *1,588.48* | | | | | *1,588.48* | | | | |
| | Transfers to and from utility plant in service accounts: | | | | | | | | | | | | | | |
| | Debits | $8,797.21 | | | | | | | | | | | | | |
| | Credits | *9,797.21* | 328 | | | | | | | | | | | | |
| | Abandoned lines not removed | | 330 | *1,076.34* | | *1,076.34* | | | | 1,076.34 | | | | | |
| | *Examiners' adjustments* | | | | | | | | | | | | | | |
| 26 | To reinstate construction costs expensed | | | | $1,480,227.70 | 1,480,227.70 | | | | | | | | *1,480,227.70* | |
| 27 | To transfer adjusted cost of property used to transport coke oven gas | | | | *762,592.06* | *762,592.06* | | 762,592.06 | | | | | | | |
| | To transfer to "Utility Plant Held For Future Use," the adjusted cost of field lines connected to nonproducing wells | | | | *21,126.61* | *21,126.61* | 21,126.61 | | | | | | | | |
| 29 | To realize depreciation on retirements of prior utility property | | | | *3,106.27* | *3,106.27* | | | | | 3,106.27 | | | | |
| 30 | To transfer to "Other Physical Property," cost of sites formerly used for compressing stations | | | | *901.50* | *901.50* | | 901.50 | | | | | | | |
| 31 | To transfer to "Utility Plant Held For Future Use," the adjusted cost of unoperated leaseholds | | | | *584,382.23* | *584,382.23* | 584,382.23 | | | | | | | | |
| 32 | To transfer to "Utility Plant Held For Future Use," the cost of wells not connected to utility plant | | | | *169,642.68* | *169,642.68* | 169,642.68 | | | | | | | | |
| 33 | Transfer to construction work in progress—Account 100-3 | | | | *16.65* | *16.65* | | | $16.65 | | | | | | |
| 34 | Transfer from production plant to transmission plant (Dr. and Cr. $6,965.64). | | | | | | | | | | | | | | |
| 35 | Transfer within general plant (Dr. and Cr. $7,200.00). | | | | | | | | | | | | | | |
| 36 | To transfer additional cost of prior units to distribution system | | | | *317.34* | *317.34* | | | | | | | | | 317.34 |
| | Total Examiners' Adjustments | *1,804,383.48* | | *232,950.69* | *61,857.64* | *2,099,171.81* | *789,148.73* | 819,025.12 | 16.65 | 279,363.97 | 1,947,976.54 | *252,752.18* | *104,811.48* | *1,598,760.95* | 19,995.41 |

figures denote **decrease.**

**[Pages 13 to 22 omitted.]**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 11 | | *Distribution Plant* | | | | | | | |
| | 357.1 | Land | 19,151.18 | | | | | | |
| | 357.22 | Rights of way | 17,818.40 | | | | | | |
| | 358.1 | Measuring and district regulating station structures | 34,352.87 | | | | | | |
| | 358.2 | Other distribution system structures | 84,840.06 | | | | | | |
| | 359.1 | Mains—Construction | 625,556.29 | | | | | | |
| | 359.21 | Mains—Pipe | 1,155,526.53 | | | | | | |
| | 359.22 | Mains—Fittings | 152,376.28 | | | | | | |
| | 360 | Pumping and regulating equipment | 51,388.06 | | | | | | |
| | 361 | Services | 184,496.15 | | | | | | |
| | 362 | Meters | 409,198.31 | | | | | | |
| | 263 | Meter installations | 378.91 | | | | | | |
| | | Total distribution plant | 2,795,083.04 | | | 2,795,083.04 | 19,995.41 | | 2,815,078.45 |
| | 100.1 | Total utility plant, in service | 56,101,875.49 | | | 56,101,875.49 | 3,803,908.72 | 5,883,085.12 | 54,022,699.09 |
| | 100.3 | Construction work in progress | 81,392.75 | | | 81,392.75 | | | 81,392.75 |
| 34 | 100.4 | Gas plant held for future use | | | | | 789,118.73 | | 789,118.73 |
| 35 | 107 | Gas plant adjustments | 94,814.75 | | | 94,814.75 | | | 94,814.75 |
| 36 | | Other physical property—coal property (100) | 341,529.68 | | | 341,529.68 | | 341,529.68 | |
| 37 | | Franchises, patent rights and other intangibles (101) | 30,185.91 | | | 30,185.91 | | 30,185.91 | |
| | | Total, gas plant | 56,649,798.58 | | | 56,649,798.58 | 4,593,027.45 | 6,254,800.71 | 54,988,025.32 |

NOTE.—Distribution Plant Accounts have not been examined in detail.

23 Docket G-113 Schedule No. 9

## Hope Natural Gas Company

*Natural gas production plant, account 332-1, producing gas wells, well construction, capitalized cost per books and as adjusted as at Dec. 31, 1938*

[Segregated by production areas]

| Production area number | Construction cost | | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|
| | Number of wells | Cost per books | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 1-1 | | | | | |
| 1-2 | 4 | $39,518.96 | $4,536.00 | $7,620.05 | $36,434.91 |
| 1 Ind | 1 | 6,302.38 | 1,134.00 | 1,802.14 | 5,834.44 |
| 2-1 | 14 | 65,112.53 | 5,670.00 | 10,297.92 | 60,484.71 |
| 2-2 | | | | | |
| 2-3 | 1 | 6,281.93 | | | 6,281.93 |
| 3-1 | 20 | 101,157.82 | 4,536.00 | 12,063.15 | 93,630.67 |
| 3-2 | 9 | 76,576.64 | 6,804.00 | 11,905.87 | 71,474.77 |
| 3-3 | 1 | 9,815.91 | 1,134.00 | 1,997.37 | 8,952.54 |
| 3-4 | | | | | |
| 3-5 | | | | | |
| 3-6 | | | | | |
| 3 Ind | | | | | |
| 4-1 | 12 | 58,373.52 | 2,268.00 | 9,457.31 | 51,184.21 |
| 4-2 | 1 | 11,234.15 | 1,134.00 | 2,033.93 | 10,334.22 |
| 4 Ind | 1 | 1,080.00 | | 293.63 | 786.37 |
| 5-1 | 24 | 118,821.15 | 7,938.00 | 24,144.92 | 102,614.23 |
| 5 Ind | | | | | |
| 6-1 | 2 | 9,637.77 | 1,134.00 | 3,764.08 | 7,007.69 |
| 6-2 | 10 | 34,207.16 | 4,536.00 | 4,982.95 | 33,760.21 |
| 6 Ind | 1 | 9,792.45 | 1,134.00 | 2,304.79 | 8,621.66 |
| 7-1 | 87 | 233,708.50 | 5,670.00 | 11,356.35 | 228,022.15 |
| 7-2 | 3 | 14,206.01 | 1,278.00 | 3,140.22 | 12,343.79 |
| 8-1 | 36 | 169,306.25 | 13,608.00 | 17,489.61 | 162,424.64 |
| 8 Ben. | 5 | 62,650.43 | 5,670.00 | 8,532.27 | 59,788.16 |
| 8 Ind | 2 | 27,839.31 | 2,268.00 | 3,798.68 | 26,308.63 |
| 9-1 | 20 | 41,570.07 | | 7,975.03 | 33,595.04 |
| 9-2 | 2 | 11,898.84 | 2,268.00 | 3,134.95 | 11,031.89 |
| 9 Ind | | | | | |
| 10-1 | 21 | 82,093.21 | 6,804.00 | 13,226.60 | 75,670.61 |
| 11-1 | 14 | 56,272.29 | 3,477.00 | 8,472.14 | 51,277.15 |
| 11-2 | | | | | |
| 11-3 | 3 | 22,762.22 | 3,402.00 | 4,940.07 | 21,224.15 |
| 11 Ind | | | | | |
| 12-1 | 10 | 38,811.77 | 2,268.00 | 3,127.65 | 37,952.12 |
| 12 Ind | 1 | 963.16 | | 81.97 | 881.19 |
| 13-1 | 48 | 220,137.53 | 41,958.00 | 43,088.93 | 219,006.60 |
| 13-2 | 24 | 114,486.28 | 14,742.00 | 19,813.15 | 109,415.13 |
| 13-3 | 24 | 128,251.70 | 20,416.76 | 25,691.35 | 122,977.11 |
| 13-4 | 3 | 15,511.03 | 3,402.00 | 2,691.12 | 16,221.91 |
| 13 Ind | | | | | |
| 14-1 | 6 | 19,185.23 | 1,134.00 | 6,257.03 | 14,062.20 |
| 14-2 | | | | | |
| 14-3 | | | | | |
| 14 Ind | 1 | 5,332.47 | 1,134.00 | 1,459.56 | 5,006.91 |
| 15-1 | 1 | 4,362.30 | | | 4,362.30 |
| 15-2 | 4 | 21,475.87 | 1,134.00 | 2,799.57 | 19,810.30 |

*Natural gas production plant, account 332–1, producing gas wells, well construction, capitalized cost per books and as adjusted as at Dec. 31, 1938*—Continued

[Segregated by production areas]

| Production area number | Construction cost | | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|
| | Number of wells | Cost per books | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 15-3 | 1 | $10,166.63 | $1,134.00 | $1,192.63 | $10,108.00 |
| 15 Ind | 1 | 6,610.24 | | 360.17 | 6,250.07 |
| 16-1 | 1 | 1,872.33 | | | 1,872.33 |
| 16 Ind | | | | | |
| 17-1 | 1 | 4,742.99 | 1,134.00 | 1,102.31 | 4,774.18 |
| 17-2 | 1 | 883.61 | | | 883.61 |
| 17-3 | | | | | |
| 17-4 | | | | | |
| 17-5 | 1 | 971.25 | | 153.10 | 818.15 |
| 17 Ind | 1 | 4,897.34 | 1,134.00 | 1,431.72 | 4,599.62 |
| 18-1 | 10 | 50,191.22 | 5,670.00 | 7,352.48 | 48,508.74 |
| 18-2 | 6 | 28,779.39 | 3,402.00 | 4,527.72 | 27,653.67 |
| 18-3 | 14 | 66,982.17 | 6,804.00 | 9,858.15 | 63,908.02 |
| 18-4 | 4 | 17,764.54 | 2,268.00 | 2,989.96 | 17,042.58 |
| 18-5 | 1 | 450.97 | | 22.90 | 428.37 |
| 18 Ind | 1 | 1,823.64 | | | 1,823.64 |
| 19-1 | 71 | 379,649.82 | 57,870.07 | 65,850.59 | 371,669.30 |
| 19-2 | 6 | 34,619.54 | 6,804.00 | 7,324.01 | 34,099.53 |
| 19 Ind | | 5,234.70 | 1,154.00 | 6,388.70 | |
| 20-1 | 57 | 268,944.12 | 40,824.00 | 47,131.99 | 262,636.13 |
| 20-2 | 14 | 87,314.66 | 14,742.00 | 21,754.92 | 80,301.74 |
| 20-Ind | 7 | 60,564.83 | 7,938.00 | 22,689.18 | 45,813.65 |
| 21-1 | 9 | 45,557.78 | 5,670.00 | 6,107.53 | 45,120.25 |
| 21-2 | 22 | 118,519.03 | 19,278.00 | 28,014.95 | 109,782.08 |
| 21-3 | 3 | 17,139.92 | 2,268.00 | 2,697.91 | 16,710.01 |
| 21 Ind | 2 | 35,414.85 | 2,268.00 | 18,838.90 | 18,843.95 |
| 22-1 | | | | | |
| 22-2 | 2 | 13,606.36 | 2,268.00 | 3,646.44 | 12,227.92 |
| 22-3 | | | | | |
| 22-4 | | | | | |
| 23-1 | | 16,588.98 | | 16,588.98 | |
| 23 Ind | | 28,224.67 | 2,268.00 | 30,492.67 | |
| 24-1 | 25 | 259,658.67 | | | 259,658.67 |
| 24-2 | 14 | 154,773.76 | | 164.83 | 154,608.93 |
| 24-3 | 6 | 73,914.74 | | | 73,914.140 |
| 24-4 | 24 | 261,308.63 | | | 261,308.63 |
| 24-5 | 3 | 33,883.55 | | 9.06 | 33,874.49 |
| 24-6 | 2 | 17,731.79 | | | 17,731.79 |
| 24-7 | 3 | 32,066.53 | | | 32,066.53 |
| 24 Ind | 1 | 11,515.74 | | | 11,515.74 |
| 25-1 | 9 | 68,460.42 | 10,206.00 | 10,638.08 | 68,028.34 |
| 25-2 | 2 | 15,251.78 | 2,268.00 | 3,010.40 | 14,509.38 |
| 25-3 | 7 | 46,775.51 | 7,938.00 | 7,706.97 | 47,006.54 |
| 25-4 | 2 | 12,404.43 | 2,268.00 | 2,043.95 | 12,628.48 |
| 25-5 | 8 | 82,376.98 | | | 82,376.98 |
| 25-6 | 4 | 45,384.38 | | 18,041.08 | 27,343.30 |
| 25 Ind | 4 | 31,866.93 | 4,536.00 | 5,757.28 | 30,645.65 |
| 26-1 | 3 | 26,817.54 | 3,402.00 | 3,788.75 | 26,430.79 |
| 26-2 | 1 | 7,016.18 | 1,134.00 | 957.39 | 7,192.79 |
| 26-3 | 2 | 14,605.17 | 2,268.00 | 3,086.21 | 13,786.96 |
| 26 Ind | | | | | |
| 27 Ind | | | | | |

*Natural gas production plant, account 332–1, producing gas wells, well construction, capitalized cost per books and as adjusted as at Dec. 31, 1938*—Continued

[Segregated by production areas]

| Production area number | Construction cost | | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|
| | Number of wells | Cost per books | Dr. | Cr. | |
| Sundry | | $31,168.44 | $200.00 | $31,368.44 | |
| Total | 772 | 4,370,612.79 | 391,689.83 | 672,824.91 | $4,089,477.71 |
| Transfers to and from utility plant in service accounts | | | | 3,679.04 | |
| Other adjustments | | | 391,689.83 | 669,145.87 | |
| | | | 391,689.83 | 672,824.91 | |



HOPE NATURAL GAS COMPANY

*Natural gas production plant, account 332–2, producing gas wells, well equipment, capitalize cost per books and as adjusted as at Dec. 31, 1938*

[Segregated by production areas]

| Production area number | Number of wells | Gas produced year 1938 M. C. F. | Cost per books | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|---|
| | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1-1 | 40 | 113,145 | $99,410.34 | $82.62 | $2,845.96 | $96,647.00 |
| 1-2 | 6 | 18,675 | 25,426.71 | | 14.58 | 25,412.13 |
| 1 Ind | 2 | 163,756 | 7,957.73 | | 132.18 | 7,825.55 |
| 2-1 | 138 | 171,772 | 403,180.82 | 101.90 | 3,635.50 | 399,647.22 |
| 2-2 | 5 | 31,146 | 5,534.91 | | 7.63 | 5,527.28 |
| 2-3 | 3 | 6,809 | 3,586.93 | | | 3,586.93 |
| 3-1 | 95 | 426,847 | 337,011.98 | 107.78 | 5,799.53 | 331,410.23 |
| 3-2 | 9 | 33,770 | 36,811.66 | | 555.90 | 36,255.76 |
| 3-3 | 5 | 31,704 | 15,160.24 | 5.75 | 338.26 | 14,827.73 |
| 3-4 | 1 | 43,114 | 3,360.87 | | | 3,360.87 |
| 3-5 | 1 | 64 | 5,689.99 | | | 5,689.99 |
| 3-6 | 3 | 12,760 | 7,238.00 | | | 7,238.00 |
| 3 Ind | 2 | 1,898 | 6,303.75 | | | 6,303.75 |
| 4-1 | 37 | 158,911 | 142,373.78 | 104.17 | 3,899.71 | 138,578.24 |
| 4-2 | 9 | 49,743 | 33,530.08 | | 79.90 | 33,470.18 |
| 4 Ind | 3 | 12,479 | 5,642.33 | | 18.40 | 5,623.93 |
| 5-1 | 201 | 996,818 | 561,160.85 | 676.10 | 4,330.36 | 557,506.59 |
| 5 Ind | 2 | 8,216 | 5,075.46 | | | 5,075.46 |
| 6-1 | 63 | 303,689 | 135,592.34 | 5.79 | 6,720.16 | 128,877.97 |
| 6-2 | 134 | 268,906 | 241,030.46 | 129.10 | 3,982.90 | 237,176.66 |
| 6 Ind | 2 | 10,804 | 5,415.38 | | | 5,415.38 |
| 7-1 | 568 | 2,587,884 | 1,348,223.09 | 721.61 | 11,477.73 | 1,337,466.97 |
| 7-2 | 18 | 112,545 | 55,374.07 | 359.29 | 175.78 | 55,557.58 |
| 8-1 | 288 | 1,486,766 | 614,546.91 | 1,351.21 | 2,433.33 | 615,864.79 |
| 8 Ben. 1 | 19 | 509,817 | 84,598.65 | 141.88 | 1,218.98 | 82,521.55 |
| 8 Ind | 2 | 30,927 | 11,802.07 | | 54.64 | 11,747.43 |
| 9-1 | 138 | 259,844 | 346,430.61 | 579.02 | 20,254.63 | 326,755.00 |
| 9-2 | 3 | 779 | 7,057.94 | | 1,149.14 | 5,908.80 |

*Natural gas production plant, account 332-2, producing gas wells, well equipment, capitalized cost per books and as adjusted as at Dec. 31, 1938*—Continued

[Segregated by production areas]

| Production area number | Number of wells | Gas produced year 1938 M. C. F. | Cost per books | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|---|
| | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 9 Ind | 1 | 13,470 | $2,153.78 | | | $2,153.78 |
| 10-1 | 272 | 1,149,506 | 667,359.36 | $489.33 | $25,927.70 | 641,920.99 |
| 11-1 | 93 | 118,809 | 197,097.43 | 34.08 | 9,363.85 | 187,767.66 |
| 11-2 | 1 | 52 | 1,960.44 | | 227.30 | 1,733.14 |
| 11-3 | 3 | 8,432 | 8,182.07 | | 30.04 | 8,152.03 |
| 11 Ind | 2 | 986 | 4,083.51 | | 13.92 | 4,069.59 |
| 12-1 | 60 | 503,643 | 130,280.51 | 31.60 | 22,388.67 | 107,923.44 |
| 12 Ind | 5 | 27,628 | 12,008.40 | | 3,370.45 | 8,637.95 |
| 13-1 | 108 | 310,114 | 206,043.87 | 13.92 | 5,350.75 | 200,707.04 |
| 13-2 | 76 | 120,464 | 160,976.83 | 178.05 | 5,140.58 | 156,014.30 |
| 13-3 | 76 | 326,735 | 131,844.72 | 4.11 | 6,196.12 | 125,652.71 |
| 13-4 | 7 | 39,178 | 16,825.61 | 19.64 | 536.37 | 16,308.88 |
| 13 Ind | 5 | 100,512 | 15,246.57 | | 2,716.09 | 12,530.48 |
| 27 14-1 | 121 | 428,540 | 260,828.11 | 12.78 | 1,366.84 | 259,474.05 |
| 14-2 | 4 | 3,037 | 4,922.42 | | 553.59 | 4,368.83 |
| 14-3 | 1 | 12,272 | 1,925.43 | | | 1,925.43 |
| 14 Ind | 2 | 11,492 | 4,231.56 | | 24.38 | 4,207.18 |
| 15-1 | 15 | 89,657 | 27,868.98 | | 88.64 | 27,780.34 |
| 15-2 | 6 | 32,564 | 15,105.52 | | 6.47 | 15,099.05 |
| 15-3 | 2 | 10,616 | 5,439.22 | | | 5,439.22 |
| 15 Ind | 2 | 11,069 | 7,647.60 | | 142.20 | 7,505.40 |
| 16-1 | 15 | 33,282 | 17,151.07 | 16.38 | 2,451.29 | 14,716.16 |
| 16 Ind | 1 | 451 | 1,405.25 | | | 1,405.25 |
| 17-1 | 2 | 18,280 | 4,619.10 | | | 4,619.10 |
| 17-2 | 8 | 46,071 | 20,719.42 | | 420.81 | 20,298.61 |
| 17-3 | 2 | 30,615 | 2,913.17 | | 188.13 | 2,725.04 |
| 17-4 | 1 | 2,624 | 2,227.85 | | 1,177.81 | 1,050.04 |
| 17-5 | 3 | 13 | 6,055.41 | | 3,158.69 | 2,896.72 |
| 17 Ind | 6 | 40,239 | 9,586.67 | 8.56 | 1,118.83 | 8,476.40 |
| 18-1 | 32 | 115,815 | 59,676.94 | 21.33 | 1,296.27 | 58,402.00 |
| 18-2 | 14 | 130,686 | 33,946.74 | 3.84 | 570.70 | 33,379.88 |
| 18-3 | 24 | 114,312 | 47,196.95 | 10.22 | 336.70 | 46,870.47 |
| 18-4 | 9 | 20,184 | 25,404.35 | | 285.18 | 25,119.17 |
| 18-5 | 6 | 19,786 | 10,481.59 | | 3,518.95 | 6,962.64 |
| 18 Ind | 5 | 24,082 | 9,745.86 | 12.14 | 7.60 | 9,750.40 |
| 19-1 | 104 | 722,343 | 249,934.53 | 298.79 | 3,565.44 | 246,672.90 |
| 19-2 | 6 | 57,826 | 14,347.67 | 11.95 | 12.45 | 14,347.17 |
| 19 Ind | 2 | | 6,781.35 | | 2,883.34 | 3,898.01 |
| 20-1 | 121 | 468,743 | 209,722.29 | 1,728.13 | 3,319.77 | 208,140.65 |
| 20-2 | 16 | 78,779 | 26,823.81 | | 1,367.64 | 25,459.17 |
| 20 Ind | 11 | 214,109 | 29,343.38 | | 4,824.75 | 24,518.63 |
| 21-1 | 11 | 33,133 | 28,795.84 | | 1,919.30 | 26,876.54 |
| 21-2 | 41 | 137,200 | 73,993.53 | | 980.12 | 73,013.41 |
| 21-3 | 4 | 15,068 | 10,600.21 | 27.42 | 377.53 | 10,250.10 |
| 21 Ind | 3 | 30,792 | 12,312.92 | | 7,253.79 | 5,059.13 |
| 22-1 | 8 | 39,906 | 14,421.02 | | 7,964.25 | 6,456.77 |
| 22-2 | 5 | 31,415 | 11,813.79 | | 2,301.97 | 9,511.82 |
| 22-3 | 10 | 110,930 | 24,361.76 | | 11,631.62 | 12,930.14 |
| 22-4 | 2 | 12,567 | 4,451.04 | | 1,885.98 | 2,565.06 |
| 23-1 | | | 8,126.02 | | 8,126.02 | |
| 23 Ind | | | 11,700.09 | | 11,700.09 | |
| 28 24-1 | 25 | 196,992 | 69,358.27 | 299.88 | | 69,658.15 |
| 24-2 | 14 | 52,999 | 49,353.44 | | 6.20 | 49,347.24 |

*Natural gas production plant, account 332–1, producing gas wells, well equipment, capitalized cost per books and as adjusted as at Dec. 31, 1938*—Continued.

[Segregated by production areas]

| Production area number | Number of wells | Gas produced year 1938 M. C. F. | Cost per books | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|---|
| | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 24–3 | 6 | 30,608 | $30,139.72 | | | $30,139.72 |
| 24–4 | 24 | 112,179 | 111,647.66 | | | 111,647.66 |
| 24–5 | 3 | 31,574 | 16,081.33 | | $50.61 | 16,030.72 |
| 24–6 | 2 | 16,473 | 4,319.03 | | | 4,319.03 |
| 24–7 | 3 | 249,891 | 14,030.54 | | | 14,030.54 |
| 24 Ind | 1 | 6,530 | 6,590.19 | | | 6,590.19 |
| 25–1 | 9 | 6,503 | 17,903.70 | | 35.17 | 17,868.53 |
| 25–2 | 2 | 15,387 | 4,418.57 | | 14.38 | 4,404.19 |
| 25–3 | 8 | 32,202 | 19,391.71 | | 824.46 | 18,567.25 |
| 25–4 | 2 | 5,535 | 4,379.97 | | | 4,379.97 |
| 25–5 | 8 | 24,623 | 21,258.96 | | | 21,258.96 |
| 25–6 | 4 | 40,988 | 26,329.70 | | 8,408.94 | 17,920.76 |
| 25 Ind | 4 | 4,903 | 7,616.76 | | 7.60 | 7,609.16 |
| 26–1 | 8 | 70,139 | 14,350.71 | | 4,838.96 | 9,511.75 |
| 26–2 | 2 | 16,501 | 3,621.99 | | 1,205.14 | 2,416.85 |
| 26–3 | 2 | 1,148 | 4,993.74 | | 6.09 | 4,987.65 |
| 26 Ind | | | 2,808.57 | | 2,808.57 | |
| 27 Ind | 3 | 10,134 | 2,806.80 | | 7.21 | 2,799.59 |
| Sundry | | | 35,346.41 | $489.75 | 35,836.16 | |
| Total | 3,261 | 14,545,783 | 7,893,605.30 | 8,078.12 | 291,173.67 | 7,610,509.75 |
| Transfers to and from utility plant in service accounts | | | | | 8,023.71 | |
| Other adjustments | | | | 8,078.12 | 283,149.96 | |
| | | | | 8,078.12 | 291,173.67 | |

[Pages 29 to 60 omitted.]

61 Docket G-113 Schedule No. 35

HOPE NATURAL GAS COMPANY

*Account 107—Gas plant adjustments*

*Details of account as at Dec. 31, 1938*

| Description | Amount |
|---|---|
| (a) | (b) |
| Clarksburg Light & Heat Co. Property Appreciation | $94,814.75 |

Details of this amount shown as per letter below:

MAY 17, 1940.

Mr. J. A. HENNIG,
*Examiner-In-Charge,*
*Federal Power Commission,*
*Clarksburg, W. Va.*

DEAR MR. HENNIG: Referring to your letter to me of April 25, 1940, requesting an explanation of the Property Appreciation Account (Clarksburg Light and Heat Company) and how the amount of $94,814.75 was determined, please be advised as follows:

In 1929 the company purchased the Physical Properties of the Clarksburg Light and Heat Company for 13,693 shares of Hope Natural Gas Company stock and $10.67 in cash. This was treated as receipt by the Clarksburg Company of $1,464,114.75, which amount was $94,814.75 above the net book cost of these properties as shown on the Clarksburg Company's books. The Hope Company reflected these properties and the book depreciation thereon on its books at the same amounts as they appeared on the Clarksburg Company's books and charged $94,814.75 to "Property Appreciation Account (Clarksburg Light and Heat Company)" by the voucher to which you referred.

Very truly yours,

(s) GEO. N. REED.

[Pages 62 to 64 omitted.]

## EXHIBIT NO. 58.—FEDERAL POWER COMMISSION UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED FOR NATURAL GAS COMPANIES (1940)

### DEFINITIONS

[Pages 1 to 2 omitted]

When used in this system of accounts:

1. "Accounts" means the accounts prescribed in this system of accounts.

2. "Actually issued," as applied to securities issued or assumed by the utility, means those which have been sold to bona-fide purchasers for a valuable consideration (including those issued in exchange for other securities or other property); also securities issued as dividends on stock, and those which have been issued in accordance with contractual requirements direct to trustees of sinking funds.

3. "Actually outstanding", as applied to securities issued or assumed by the utility, means those which have been actually issued and are neither retired nor held by or for the utility; provided, however, that securities held by trustees shall be considered as actually outstanding.

4. "Amortization" means the gradual extinguishment of an amount in an account by prorating such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

5. A. "Associated companies" means companies or persons that, directly or indirectly, through one or more intermediaries, control, or are controlled by, or are under common control with, the accounting company.

B. "Control" (including the terms "controlling", "controlled by", and "under common control with") means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a company, whether such power is exercised through one or more intermediary companies, or alone, or in conjunction with, or pursuant to an agreement, and whether

such power is established through a majority or minority ownership or voting of securities, common directors, officers, or stockholders, voting trusts, holding trusts, associated companies, contract, or any other direct or indirect means.

6. "Book cost" means the amount at which property is recorded in these accounts without deduction of related reserves or other accounts. As applied to gas plant, "book cost" means the amount at which property is included in account 100.6 or in accounts 100.1 to 100.4.

7. "Buildings." (See Gas plant instruction 10.)

8. "Commission" means the Federal Power Commission.

9. "Construction cost, components of." (See Gas plant instruction 5.)

10. "Cost" means the amount of money actually paid for property or services or the cash value at the time of the transaction of any consideration other than money. (See, however, Gas plant instruction 3.)

11. "Cost of removal" means the cost of demolishing, dismantling, tearing down, or otherwise removing gas plant, including the cost of transportation and handling incidental thereto.

4 12. "Debt expense" means all expenses in connection with the issuance and initial sale of evidences of debt, such as fees for drafting mortgages and trust deeds; fees and taxes for issuing or recording evidences of debt; cost of engraving and printing bonds and certificates of indebtedness; fees paid trustees; specific costs of obtaining governmental authority; fees for legal services; fees and commissions paid underwriters, brokers, and salesmen for marketing such evidences of debt; fees and expenses of listing on exchanges; and other like costs.

13. "Depletion," as applied to natural gas producing land and land rights, means the loss in service value incurred in connection with the exhaustion of the natural resource in the course of service.

14. "Depreciation," as applied to depreciable gas plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and

requirements of public authorities, and, in the case of natural gas companies, the exhaustion of natural resources.

15. "Discount," as applied to the securities issued or assumed by the utility, means the excess of the par (stated value of no par stocks) or face value of the securities plus interest or dividends accrued at the date of the sale over the cash value of the consideration received from their sale.

16. "Distribution system." (See Gas plant instruction 16.)

17. "Equipment." (See Gas plant instruction 11.)

18. "Improvements." (See Gas plant instruction 10.)

19. "Investment advances" means advances, represented by notes or by book accounts only, with respect to which it is mutually agreed or intended between the creditor and debtor that they shall be settled by the issuance of capital stock or long-term obligations, or shall not be subject to current settlement.

20. "Land and land rights." (See Gas plant instruction 9.)

21. "Minor items of property" means the associated parts or items of which units of property are composed.

22. "Natural gas" means either natural gas unmixed, or any mixture of natural and artificial gas.

23. "Natural gas company" means a person engaged in the transportation of natural gas in interstate commerce, or the sale in interstate commerce of such gas for resale.

24. "Net book cost," when applied to gas plant means the book cost less related depreciation, amortization, and depletion reserves. When applied to other property, it means book cost less related reserves for loss in value.

25. "Net original cost," as applied to gas plant, means the original cost less related depreciation, amortization, and depletion reserves.

26. "Net salvage value" means the salvage value of property retired less the cost of removal.

27. "Nominally issued," as applied to securities issued or assumed by the utility, means those which have been signed, certified, or otherwise executed, and placed with the proper officer for sale and delivery, or pledged, or otherwise placed in some special fund of the utility, but which have not been sold or issued direct to trustees of sinking funds in accordance with contractual requirements.

28. "Nominally outstanding," as applied to securities issued or assumed by the utility, means those which, after being actually issued have been reacquired by or for the utility under circum-

stances which require them to be considered as held alive and not retired; provided, however, that securities held by trustees shall be considered as actually outstanding.

29. "Original cost," as applied to gas plant, means the cost of such property to the person first devoting it to public service.

30. "Person" means an individual, a corporation, a partnership, an association, a joint-stock company, a business trust, or any organized group of persons, whether incorporated or not, or any receiver or trustee.

31. "Premium," as applied to the securities issued or assumed by the utility, means the excess of the cash value of the consideration received from their sale over the sum of their par (stated value of no par stocks) or face value and interest or dividends accrued at the date of sale.

32. "Property retired," as applied to gas plant, means property which has been removed, sold, abandoned, destroyed, or which for any cause has been withdrawn from gas service.

33. "Replacing" or "replacement," when not otherwise indicated in the context, means the construction or installation of gas plant in place of property retired, together with the removal of the property retired.

34. "Salvage value" means the amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale, or, if retained, the amount at which the material recoverable is chargeable to Account 131, Materials and Supplies, or other appropriate account.

35. "Service value" means the difference between original cost and the net salvage value of gas plant.

36. "Structures." (See Gas plant instruction 10.)

37. "Transmission system." (See Gas plant instruction 16.)

38. "Retirement units" means those items of gas plant which, when retired, with or without replacements, are accounted for by crediting the book cost thereof to the gas plant account in which included.

39. "Utility," as used herein and when not otherwise indicated in the context, means any natural gas company to which this system of accounts is applicable.

[Pages 6 to 30 omitted.]

## XI. Reserves

### 250.1 Reserve for Depreciation of Gas Plant

A. This account shall be credited with the following:

Amounts charged to Account 503.1, Depreciation, to Account 508, ncome from Gas Plant Leased to Others, to clearing accounts, or o income or other accounts for currently accruing depreciation.

Amounts charged to Account 414, Miscellaneous Debits to Sur-lus, for past accrued depreciation.

Amounts of depreciation applicable to gas properties acquired as perating units or systems. (See Gas plant instruction 4.)

Amounts chargeable upon approval of the Commission to ccount 141, Extraordinary Property Losses.

Amounts of depreciation applicable to gas plant donated to the tility.

B. At the time of retirement of depreciable gas plant in service, his account shall be charged with the book cost of the property etired and the cost of removal, and shall be credited with the alvage value and any other amounts recovered, such as insurance.

C. For balance sheet purposes, this account shall be regarded nd treated as a single composite reserve. For purposes of analysis, owever, each utility shall maintain records in which the depre-iation reserve shall be segregated according to the following funé-ional classification of gas plant: (1) Production—manufactured as, (2) production—natural gas, (3) storage, (4) transmission, 5) distribution, and (6) general. The credits and debits to the eserve shall be so made as to show separately (1) the amount of he accrual for depreciation, (2) the book cost of property retired, 3) cost of removal, (4) salvage, and (5) other items, including ecoveries from insurance.

D. When transfers of property are made from one utility plant ccount to another or from or to nonutility property, the account-ng shall be as provided in Gas plant instruction 14.

E. This account shall be subdivided as follows:

250.11 Reserve for Depreciation of Gas Plant in Service.
250.12 Reserve for Depreciation of Gas Plant Leased to Others.
250.13. Reserve for Depreciation of Gas Plant Held for Future Use.

Note.—The utility is restricted in its use of the reserve to the purposes set rth above. It shall not divert any portion of the reserve to surplus or make ny other use thereof without the approval of the Commission.

32 250.2 RESERVE FOR AMORTIZATION AND DEPLETION OF PRODUCING NATURAL GAS LAND AND LAND RIGHTS

A. This account shall be credited with amounts charged to Account 503.2, Amortization and Depletion of Producing Natural Gas Land and Land Rights, or Account 508, Income from Gas Plant Leased to Others, to provide for the current amortization and depletion of land and land rights from which natural gas is obtained. (See Gas plant instruction 9–I.)

B. This account shall also be credited with such amounts as are necessary to reflect, as of the effective date of this system of accounts, the portion of the cost of land and land rights which have been exhausted through the extraction of natural gas. To the extent that provision has not previously been made for amortization and depletion of such land and land rights, amounts credited to this reserve shall be concurrently debited to Account 414, Miscellaneous Debits to Surplus.

C. When natural gas-producing land or land rights are sold, relinquished, or otherwise retired from service, the book cost of the land or land rights so retired, less any proceeds realized at retirement, shall be charged to this account; provided, however, that any excess of the book cost (less proceeds realized from sale) over the amount accumulated therefor in this reserve shall be debited to the appropriate surplus account, unless otherwise authorized or directed by the Commission.

D. Records shall be maintained so as to show separately the balance applicable to each item of land and land rights which is being amortized or depleted, except that natural gas land and land rights which constitute an interest in one pool of gas may be grouped to form one unit for amortization and depletion and the reserve applicable thereto need not be segregated to show the amount related to each gas right included therein.

E. This account shall be subdivided as follows:

250.21 Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights—Gas Plant in Service.

250.22 Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights—Gas Plant Leased to Others.

NOTE.—The utility is restricted in its use of the reserve to the purposes set forth above. It shall not divert any portion of the reserve to surplus or make any other use thereof without approval of the Commission.

[Pages [illegible] and 35 omitted.]

36 INSTRUCTIONS—GAS PLANT ACCOUNTS

1. PURPOSE OF GAS PLANT ACCOUNTS

A. The summary gas plant accounts are as follows:

100. Gas Plant.

100.1 Gas Plant in Service.
100.2 Gas Plant Leased to Others.
100.3 Construction Work in Progress.
100.4 Gas Plant Held for Future Use.
100.5 Gas Plant Acquisition Adjustments.
100.6 Gas Plant in Process of Reclassification.

107. Gas Plant Adjustments.

B. Account 100 is a caption by which shall be reported the amounts in accounts 100.1 to 100.6, inclusive.

C. Accounts 100.1 to 100.4, inclusive, are designed to show the original cost of gas plant acquired as operating units or systems by purchase, merger, consolidation, liquidation, or otherwise, and the cost to the utility of all other gas plant recorded in these accounts.

D. Account 100.5 is designed to show the difference between the cost to the utility of gas plant acquired as operating units or systems by purchase, merger, consolidation, liquidation, or otherwise, and the original cost of the plant, due consideration being given to any depreciation, depletion, or amortization recorded by the accounting utility at the date of acquisition.

E. Account 100.6 is designed to be used as a control account for gas plant at the effective date of this system of accounts pending the distribution thereof in accordance with the accounts prescribed herein.

F. Account 107 is designed to show the amount by which the book cost of gas plant at the effective date of this system of accounts differs from the cost of the plant to the utility when the difference is not properly includible in other accounts. It shall include all write-ups in the books as of the effective date of this system of accounts.

NOTE.—See balance sheet accounts 100 and 107.

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## 2. Classification of Gas Plant at Effective Date of System of Accounts

A. Each utility shall classify its gas plant as of the effective date of this system of accounts in accordance with the gas plant accounts prescribed herein. The classification shall be so made as to show both the original cost and the cost to the utility of its gas plant.

B. The cost to the utility of its gas plant shall be ascertained by analysis of the utility's records. In ascertaining the cost it is not intended that any correction need be made for depreciation,
37 depletion, or amortization applicable to operating units or systems previously acquired, whether or not such depreciation, depletion, or amortization was recorded in the books of the accounting utility. It is likewise not intended that adjustments shall be made to record in gas plant accounts amounts previously charged to operating expenses in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts.

C. The detailed gas plant accounts (301 to 390, inclusive) shall be stated on the basis of cost to the utility of plant constructed by it and the original cost, estimated if not known, of plant acquired as an operating unit or system. The difference between the original cost, as above, and the cost to the utility of plant includible in accounts 100.1 to 100.4, inclusive, after giving effect to any depreciation, depletion, or amortization recorded by the accounting utility at the time of acquisition, shall be recorded in Account 100.5, Gas Plant Acquisition Adjustments. The original cost of gas plant may be determined by analysis of the utility's records or those of predecessor or vendor companies with respect to gas plant previously acquired as operating units or systems and the difference between the original cost so determined and the cost to the utility, with adjustments for retirements from date of acquisition to the effective date of this system of accounts, shall be entered in Account 100.5, Gas Plant Acquisition Adjustments. When practicable, amounts recorded in account 100.5 shall be classified according to the nature of the items of which composed. Any difference between the cost of gas plant and its book cost, when not properly includible in other accounts, shall be recorded in Account 107, Gas Plant Adjustments.

D. Not later than 2 years after the effective date of this system of accounts, each utility shall have completed the studies necessary for classifying its gas plant as of the effective date of this system of accounts in accordance with the accounts prescribed herein and it shall submit to the Commission the entries it proposes to make to carry out the provisions of this instruction. It shall submit, also, a comparative balance sheet showing the accounts and amounts appearing in its books as of the effective date of this system of accounts and the accounts and respective amounts as of the same date after the proposed entries shall have been made.

E. Pending the classification of gas plant at the effective date of this system of accounts in accordance with the accounts prescribed herein, each utility shall maintain its present accounts with respect to such property as subaccounts of Account 100.6, Gas Plant in Process of Reclassification.

### 3. Gas Plant To Be Recorded at Cost

A. All amounts included in the accounts for tangible gas plant consisting of plant acquired as an operating unit or system shall be stated at the original cost incurred by the person who first devoted the property to gas service. All other tangible gas plant shall be included in the accounts at the cost incurred by the utility.

B. All amounts included in the accounts for intangible gas plant shall likewise be stated on the basis provided in paragraph A above except as otherwise provided in the texts of the intangible accounts.

38 C. Where the term "cost" is used in the detailed gas plant accounts, it shall have the meaning stated in paragraphs A and B above and shall include not only the materials, supplies, labor, services, and other items consumed or employed in the construction and installation of gas plant, but also the cost of preliminary studies, plans, surveys, engineering, supervision, and general expenses, which contribute directly and immediately to gas plant without duplication of such costs.

D. When the consideration given for property is other than cash, the value of such consideration shall be determined on a cash basis. In the entry recording such transaction, the actual consideration shall be described with sufficient particularity to identify it. The utility shall be prepared to furnish the Commission the particulars of its determination of the cash value of the consideration, if other than cash.

E. When property is purchased under a plan involving deferred payments, no charge shall be made to the gas plant accounts for interest, insurance, or other expenditures occasioned solely by such form of payment.

F. Gas plant contributed to the utility or constructed by it from contributions to it of cash or its equivalent shall be charged to the gas plant accounts at original cost. There shall be credited to the depreciation, depletion, and amortization reserve accounts the estimated amount of depreciation, depletion, and amortization applicable to the property at the time of its contribution to the utility. The difference between the amounts included in the gas plant accounts and the reserve accounts shall be credited to Account 265, Contributions in Aid of Construction.

NOTE.—Amounts received for construction which are ultimately to be refunded, wholly or in part, shall be credited to Account 241, Customers' Advances for Construction. When the amount to be refunded has been finally determined, any credit balance remaining in account 241 shall be credited to Account 265, Contributions in Aid of Construction.

### 4. GAS PLANT PURCHASED

A. When gas plant constituting an operating unit or system is acquired by purchase, merger, consolidation, liquidation, or otherwise, after the effective date of this system of accounts, the cost of acquisition, including expenses incidental thereto and properly includible in gas plant, shall be charged to Account 100.1, Gas Plant in Service, Subaccount 391, Gas Plant Purchased.

B. The accounting for the acquisition shall then be completed as following:

(1) The original cost, estimated if not known, shall be credited to Account 100.1, Gas Plant in Service, Subaccount 391, Gas Plant Purchased, and concurrently charged to Account 100.1, Gas Plant in Service, Account 100.2, Gas Plant Leased to Others, Account 100.3, Construction Work in Progress, Account 100.4, Gas Plant Held for Future Use, as appropriate, and distributed to the detailed accounts which they control.

(2) The depreciation, or amortization and depletion reserve requirements applicable to the original costs of the properties purchased, if required by the Commission to be recorded by the accounting utility, shall be charged to Account 100.1, Gas Plant in Service, Subaccount 391, Gas Plant Purchased, and concurrently credited to Account 250.1, Reserve for Depreciation of Gas Plant, Account 250.2, Reserve for Amortization and

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Depletion of Producing Natural Gas Land and Land Rights, and Account 251, Reserve for Amortization of Other Limited-Term Gas Investments, as appropriate.

(3) The amount remaining in Account 391, Gas Plant Purchased, shall then be closed to Account 100.5, Gas Plant Acquisition Adjustments.

C. A memorandum record shall be kept of the amount of contributions in aid of construction applicable to the property acquired as shown by the accounts of the previous owner.

D. When any property acquired as an operating unit or system includes duplicate or other gas plant which will be retired by the accounting utility in the reconstruction of the acquired property or its consolidation with the previously owned property, the accounting for such property shall be presented to the Commission for consideration and approval.

E. If property acquired in the purchase of an operating unit or system is in such physical condition when acquired that it is necessary substantially to rehabilitate it in order to bring the property up to the standards of the utility, the cost of such work, except replacements, shall be accounted for as a part of the purchase price of the property.

F. In connection with the acquisition of gas plant constituting an operating unit or system, the utility shall procure, if possible, all existing records relating to the property acquired, or certified copies thereof, and shall preserve such records until specifically authorized by the Commission to destroy or otherwise dispose of them.

NOTE.—In cases of mergers or consolidations occurring prior to the determination of original cost of the plant of the merging or consolidating utilities, the accounts of the constituent utilities, with the approval of the Commission, may be combined. In the event original cost has not been determined, the resulting utility shall proceed to determine such cost as outlined herein.

### 5. COMPONENTS OF CONSTRUCTION COST

The cost of construction properly includible in the gas plant accounts shall include, where applicable, the direct and overhead costs as listed and defined hereunder:

(1) "Contract work" includes amounts paid for work performed under contract by other companies, firms, or individuals, costs incident to the award of such contracts, and the inspection of such work. It does not include the cost of work performed by the utility

on the project, a part of which is performed by others under contract.

(2) "Labor" includes the pay and expenses of employees of the utility engaged on construction work, and also workmen's compensation insurance, pay roll taxes, and similar items of expense. It does not include the pay and expenses of employees which are distributed to construction through clearing accounts nor the pay and expenses included in other items hereunder.

(3) "Materials and supplies" includes the purchase price at the point of free delivery plus customs duties, excise taxes, the cost of inspection, loading and transportation, the related stores expenses, and the cost of fabricated materials from the utility's shop. In determining the cost of materials and supplies used for construction, proper allowance shall be made for unused materials and supplies, for materials recovered from temporary structures used in performing the work involved, and for discounts allowed and realized in the purchase of materials and supplies.

NOTE A.—The cost of individual items of equipment of small value (for example, $10 or less) or of short life, including small portable tools and implements, shall not be charged to gas plant accounts unless the correctness of the accounting therefor is verified by current inventories. The cost may be charged to the appropriate operating expense or clearing accounts, according to the use of such items, or, if such items are consumed directly in construction work, the cost shall be included as part of the cost of the constructed unit.

NOTE B.—Gas owned by the utility used in well construction shall be charged thereto at the cost with an offsetting credit to Account 749, Duplicate Charges—Cr.

(4) "Transportation" includes the cost of transporting employees, materials and supplies, tools, purchased equipment, and other work equipment (when not under own power) to and from points of construction. It includes amounts paid to others as well as the cost of operating the utility's own transportation equipment. (See item 5 following.)

(5) "Special machine service" includes the cost of labor (optional), materials and supplies, depreciation, and other expenses incurred in the maintenance, operation, and use of special machines, such as steam shovels, pile drivers, derricks, ditchers, scrapers, material unloaders, and other labor-saving machines; also expenditures for rental, maintenance, and operation of machines of others. It does not include the cost of small tools and other individual items of small value or short life which are in-

cluded in the cost of materials and supplies. (See item 3, above.) When a particular construction job requires the use for an extended period of time of special machines, transportation or other equipment, the net book cost thereof, less the appraised or salvage value at time of release from the job, shall be included in the cost of construction.

(6) "Shop service" includes the proportion of the expense of the utility's shop department assignable to construction work, except that the cost of fabricated materials from the utility's shop shall be included in "materials and supplies."

(7) "Protection" includes the cost of protecting the utility's property from fire or other casualties and the cost of preventing damages to others, or to the property of others, including payments for discovery or extinguishment of fires, cost of apprehending and prosecuting incendiaries, witness fees in relation thereto, amounts paid to municipalities and others for fire protection, and other analogous items of expenditures in connection with construction work.

(8) "Injuries and damages" includes expenditures or losses in connection with construction work on account of injuries to persons and damages to the property of others; also the cost of investigation of and defense against actions for such injuries and damages. Insurance recovered or recoverable on account of compensation paid for injuries to persons incident to construction shall be credited to the account or accounts to which such compensation is charged. Insurance recovered or recoverable on account of property damages incident to construction shall be credited to the account or accounts charged with the cost of the damages.

41 (9) "Privileges and permits" includes payments for and expenses incurred in securing temporary privileges, permits, or rights in connection with construction work, such as for the use of private or public property, streets, or highways, but it does not include rents, or amounts chargeable as franchises and consents, for which see Account 302, Franchises and Consents.

(10) "Rents" includes amounts paid for the use of construction quarters and office space occupied by construction forces and amounts properly includible in construction costs for such facilities jointly used.

(11) "Engineering and supervision" includes the portion of the pay and expenses of engineers, surveyors, draftsmen, inspectors, superintendents, and their assistants applicable to construction work.

(12) "General administration capitalized" includes the portion of the pay and expenses of the general officers and administrative and general expenses applicable to construction work.

(13) "Engineering services" includes amounts paid to other companies, firms, or individuals engaged by the utility to plan, design, prepare estimates, supervise, inspect, or give general advice and assistance in connection with construction work. A copy of the agreement or arrangement under which such services are rendered shall be preserved.

(14) "Insurance" includes premiums paid or amounts provided or reserved as self-insurance for the protection against loss and damages in connection with construction, by fire or other casualty, injury to or death of persons other than employees, damages to property of others, defalcation of employees and agents, and the nonperformance of contractual obligations of others. It does not include workmen's compensation or similar insurance on employees included as "labor" in item 2, above.

(15) "Law expenditures" includes the general law expenditures incurred in connection with construction and the court and legal costs directly related thereto, other than law expenses included in protection, item 7, and in injuries and damages, item 8.

(16) "Taxes" includes taxes on physical property (including land) during the period of construction and other taxes properly includible in construction costs before the facilities become available for service.

(17) "Interest during construction" includes the net cost of borrowed funds used for construction purposes and a reasonable rate upon the utility's own funds when so used. Interest during construction shall be charged to the individual job upon which the funds are expended and shall be credited to Account 536, Interest Charged to Construction—Cr. The period for which interest may be capitalized shall be limited to the period of construction. No interest charges shall be included in these accounts upon expenditures for construction projects which have been abandoned.

NOTE.—When a part only of a plant or project is placed in operation or is completed and ready for service but the construction work as a whole is incomplete, that part of the cost of the property placed in operation, or ready for service, shall be treated as "Gas Plant in Service" and interest thereon as a charge to construction shall cease. Interest on that part of the cost of the plant which is incomplete may be continued as a charge to construction until such time as it is placed in operation or is ready for service, except as limited in items 17, above.

(18) "Earnings and expenses during construction" include (*a*) all revenues derived during the construction period from property which is included in the cost of the project under construction and (*b*) all expenses (except taxes) which are attributable to the revenues received.

### 6. Overhead Construction Costs

A. All overhead construction costs, such as engineering, supervision, general office salaries and expenses, construction engineering and supervision by others than the accounting utility, law expenses, insurance, injuries and damages, relief and pensions, taxes, and interest, shall be charged to particular jobs or units on the basis of the amounts of such overheads reasonably applicable thereto, to the end that each job or unit shall bear its equitable proportion of such costs and that the entire cost of the unit, both direct and overhead, shall be deducted from the gas plant accounts at the time the unit of property is retired.

B. The instructions contained herein shall not be interpreted as permitting the addition to gas plant accounts of arbitrary percentages or amounts to cover assumed overhead costs, but as requiring the assignment to particular jobs and accounts of actual and reasonable overhead costs.

C. The records supporting the entries for overhead construction costs shall be so kept as to show the total amount of each overhead for each year, the nature and amount of each overhead expenditure charged to each construction work order and to each gas plant account, and the bases of distribution of such costs.

### 7. Leased Property, Expenditures On

A. Except as provided in paragraph B, following, the cost of initial improvements (including repairs, rearrangements, additions, and betterments) to property leased from others made in the course of preparing the property for service and the cost of any subsequent additions or betterments to such leased property shall be charged to the gas plant or other property account appropriate for the class of property leased. (See Account 100.1 and Operating expense instruction 5.)

B. When the initial improvements to leased property which are otherwise chargeable to gas plant or other property accounts are of relatively minor cost or short life or the lease is for a period of not more than 1 year, the cost shall be charged to the account in which the rent expense is included.

C. Provision for the retirement of improvements to leased property shall be made either through Account 251, Reserve for Amortization of Other Limited-Term Gas Investments, by concurrent charges to Account 504, Amortization of Other Limited-Term Gas Investments, or through Account 250.1, Reserve for Depreciation of Gas Plant, by concurrent charges to Account 503.1, Depreciation. The annual amortization or depreciation provision shall be determined in the following manner:

(1) If the service life of the improvements is terminated by action of the lease and not by depreciation (see definition 14), then the service value of the improvements should be
43 spread over the life of the lease by charges to Account 504, Amortization of Other Limited-Term Gas Investments, and credits to Account 251, Reserve for Amortization of Other Limited-Term Gas Investments.

(2) If the service life is terminated not by action of the lease but by depreciation, then the service value of the improvements should be accounted for as depreciable plant (see Accounts 503.1 and 250.1).

### 8. Temporary Facilities

When property ordinarily having a service life of more than 1 year is installed for temporary use in gas service, it shall be accounted for in the manner prescribed for gas plant in service.

### 9. Land and Land Rights

A. "Land and land rights" means land owned in fee by the utility and rights, interests, and privileges held by the utility in land owned by others, such as leaseholds, easements, natural gas rights, rights-of-way, and other like interests in land.

B. The accounts for land and land rights shall include the first cost, including the amounts of mortgages or other liens assumed, but not rents payable periodically with respect to such rights.

C. Where special assessments for public improvements provide for deferred payments, the full amount of the assessments shall be charged to the appropriate land account and the unpaid balance shall be carried in an appropriate liability account. Interest on unpaid balances shall be charged to the appropriate interest account. If any part of the cost of public improvements is included in the general tax levy, the amount thereof shall be charged to the appropriate tax account; otherwise the cost of public improvements, including cost of sidewalks and curbs constructed by the

utility on public streets, should be charged to the accounts for land and land rights.

D. The net profit from the sale of timber, cordwood, or other property acquired with rights-of-way or other lands shall be credited to the appropriate land and land rights account. Where land is held for a considerable period of time and timber on the land at the time of purchase increases in value, the net profit (after giving effect to the cost of the timber) from the sales of timber or its products shall be credited to Account 526, Miscellaneous Nonoperating Revenues.

E. Separate entries shall be made for the acquisition, transfer, or retirement of each parcel of land, and each land right, or gas right (except rights-of-way for distribution lines) having a life of more than 1 year. A record shall be maintained showing the nature of ownership, full legal description, area, map reference, purpose for which used, city, county, and tax district in which situated, from whom purchased or to whom sold, payment given or received, other costs, contract date and number, date of recording of deed, and book and page of record. Entries transferring or retiring land or land rights shall refer to the original-entry recording its acquisition. A parcel of land acquired and carried on the books as a unit is not required to be subdivided with transfers to other land accounts merely because of the erection thereon of an incidental structure to be used in gas operations but for a purpose differing from that for which the land is chiefly employed; for example, a small general storehouse on production plant land.

44 F. Any difference between the amount received from the sale of land or land rights, less agents' commissions and other costs incident to the sale, and the book cost of such land or rights, shall be charged to Account 414, Miscellaneous Debits to Surplus, or credited to Account 401, Miscellaneous Credits to Surplus, as appropriate, unless a reserve therefor has been authorized and provided. Appropriate adjustments of the accounts shall be made with respect to any structures or improvements located on land sold.

G. Entries to the gas plant accounts for limited-term interests in land (except rights-of-way for distribution lines) shall make specific reference to the lease, contract, or arrangement under which each interest is held or used, together with a concise statement of the terms of the lease, contract, or arrangement.

H. The cost of buildings and other improvements (other than public improvements) shall not be included in the land accounts. If at the time of acquisition of an interest in land such interest extends to buildings or other improvements (other than public improvements), which are then devoted to gas operations, the land and improvements shall be separately appraised and the cost allocated to land and buildings or improvements on the basis of the appraisals. If the improvements are removed or wrecked without being used in operations, the cost thereof and the cost of removing or wrecking shall be charged and the salvage credited to the account in which the cost of the land is recorded.

I. The cost of land and land rights acquired in excess of that used in gas operations shall be included in Account 110, Other Physical Property, or Account 100.4 Gas Plant Held for Future Use, as appropriate. Regarding land and land rights held for the production of natural gas: Account 100.1, Gas Plant in Service, shall include (1) the cost of lands owned in fee upon which producing natural-gas wells are located or lands owned in fee which are being drained through the operation by the utility of wells on other land, and (2) the first cost of lands held under lease upon which the utility pays royalties for the natural gas obtained therefrom. The cost of all other land and land rights held for the production of natural gas under a definite plan for such use shall be included in Account 100.4, Gas Plant Held for Future Use.

NOTE.—In addition to the accounting records prescribed herein, supplemental records of land and land rights held for future use shall be kept in such manner as to permit the segregation within a reasonable time of the land and land rights constituting (1) productive but nonproducing fields, and (2) unproven or undeveloped fields, and to show the following data with respect to each natural gas lease, regardless of the accounting treatment accorded the lease costs: (*a*) name of lessor, (*b*) location of leasehold and number or other identification assigned thereto, (*c*) date and period of lease agreement, (*d*) first cost of lease including details of the elements of such cost, (*e*) annual rental provisions, (*f*) date and cost of drilling, (*g*) date gas determined to exist, (*h*) date of completion of first well drilled by the utility in each pool of gas, (*i*) royalty provisions, (*j*) amortization and depletion provisions, and (*k*) date of abandonment of lease.

J. When the purchase of land for gas operations requires the purchase of land not used for such purposes, the charge to the specific land account shall be based upon the estimated cost of only that portion which is used for gas operations. The cost of the remaining land shall be included in Account 100.4, Gas Plant

Held for Future Use, or Account 110, Other Physical Property, as appropriate.

45 K. Provision shall be made for amortizing amounts carried in the accounts for limited-term interests in land. The amortization of limited-term interests in land shall be accomplished in such manner as to apportion equitably the cost of each interest over the life thereof and to produce a charge to operating expenses, for each accounting period, of the amount properly chargeable thereto for such period. For the purposes of amortization of natural gas rights, separate interests in land which constitute an interest in one pool of gas may be grouped to form a depletion unit. (See Account 250.2, Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights, Account 250.3, Reserve for Abandoned Leases, and Account 251, Reserve for Amortization of Other Limited-Term Gas Investments; also Account 503.2, Amortization and Depletion of Producing Natural Gas Land and Land Rights, Account 504, Amortization of Other Limited-Term Gas Investments, and Account 512, Abandoned Leases.)

L. The items of cost to be included in the accounts for land and land rights are as follows:

Bulkheads, buried, not requiring maintenance or replacement.
Cost, first, of acquisition including mortgages and other liens assumed (but not subsequent interest thereon).
Clearing (first cost) the land of brush, trees, and debris.
Condemnation proceedings, including court and counsel costs.
Consents and abutting damages, payment for.
Conveyancers' and notaries' fees.
Fees, commissions, and salaries to brokers, agents, and others in connection with the acquisition of the land or land rights.
Grading the land, except when directly occasioned by the building of a structure.
Leases, cost of voiding upon purchase to secure possession of land.
Removing, relocating, or reconstructing property of others, such as buildings, highways, railroads, bridges, cemeteries, churches, telephone and power lines, etc., in order to acquire quiet possession.
Retaining walls unless identified with structures.
Special assessments levied by public authorities for public improvements on the basis of benefits for new roads, new bridges, new sewers, new curbing, new pavements, and other public improvements, but not taxes levied to provide for the maintenance of such improvements.
Surveys in connection with the acquisition
Taxes, assumed, accrued to date of transfer of title.
Title, examining, clearing, insuring, and registering in connection with the acquisition and defending against claims relating to the period prior to the acquisition.

## 10. Structures and Improvements

A. "Structures and improvements" means all permanent buildings and structures to house, support, or safeguard property or persons, and improvements of a permanent character other than public improvements on or to land.

B. "Buildings" means permanent structures to house, support, or safeguard property or persons, including all fixtures permanently attached to and made a part of buildings and which cannot be removed therefrom without cutting into the walls, ceilings, or floors, or without in some way impairing the buildings.

C. "Improvements" means permanent improvements (other than buildings) to land.

46 D. Items of cost:

Architects' plans.
Ash pits (when located within the building proper).
Athletic field structures and improvements.
Boilers, furnaces, piping, wiring, fixtures, and machinery for heating, lighting, signaling, ventilating, and plumbing.
Bulkheads, including dredging, riprap fill, piling, decking, concrete, fenders, etc., when exposed and subject to maintenance and replacement.
Chimneys.
Coal bins and bunkers.
Commissions and fees to brokers, agents, architects, and others.
Conduit (not to be removed) with its contents.
Damages to abutting property during construction.
Docks.
Door checks and door stops.
Drainage and sewerage systems.
Elevators, cranes, hoists, etc., and the machinery for operating them.
Excavation, including shoring, bracing, bridging, refill, and disposal of excess excavated material.
Fences and fence curbs (not including protective fences isolating individual items of equipment, which should be charged to the appropriate equipment account).
Fire protection systems when forming a part of a structure.
Floor covering (permanently attached).
Foundations and piers for machinery, constructed as a permanent part of a building or other item listed herein.
Grading when directly occasioned by the building of a structure.
Holders—relief.
Holders—waterless, including steel structure, piston elevators, cost of first tar seal, tar apparatus and storage tanks, stairways, etc.
Holders—waterseal, including tank construction, water, holder lifts, framework; stairways, and heating equipment.
Inlet and outlet lines to holders and storage tanks, including inlet and outlet valve pits and drip pumps.

Intrasite communication system, poles, pole fixtures, wires, and cables.
Landscaping, lawns, shrubbery, etc.
Leases, voiding upon purchase, to secure possession of structures.
Leased property, expenditures on.
Lighting fixtures and outside lighting systems.
Natural gas wells used solely for storage of gas.
Painting, first.
Partitions, including movable.
Permits and privileges.
Platforms, railings, and gratings, when constructed as a part of a structure.
Power boards for services to a building.
Refrigerating systems for general use.
Retaining walls, except when identified with land.
Roadways, railroads, bridges, and trestles intrasite, except railroads provided for in equipment accounts.
Scales, connected to and forming a part of a structure.
Screens.
Sewer systems, for general use.
Sidewalks, curbs, and streets constructed by the utility, except sidewalks and curbs on public streets.
Sprinkling systems.
Stacks—brick, steel, or concrete, when set on foundation forming part of general foundation and steelwork of a building.
Storage facilities constituting a part of a building.
Storm doors and windows.
Subways, areaways, and tunnels, directly connected to and forming part of a structure.
Tanks constructed as part of a building or as a distinct structural unit.
Tunnels, intake and discharge, when constructed as part of a structure, and those constructed to house mains.
Vaults constructed as part of a building.
47 Water-front improvements.
Water-supply piping, hydrants, and wells.
Water-supply system for a building or general company purposes.
Wharves.
Window shades and ventilators.
Yard-drainage system.
Yard-lighting system.
Yard surfacing, gravel, concrete, or oil.

NOTE.—The cost of disposing of material excavated in connection with construction shall be considered as a part of the cost of such work, except as follows: (*a*) When such material is used for filling, the cost of loading, hauling, and dumping shall be equitably apportioned between the work in connection with which the removal occurs and the work in connection with which the material is used; (*b*) when such material is sold, the net amount realized from such sales shall be credited to the work in connection with which the removal occurs. If the amount realized from the sale of excavated materials exceeds the removal costs and the costs in connection with the sale, the excess shall be credited to the land account in which the site is carried.

E. Items not included in buildings:

(1) Do not include in the cost of buildings, lighting, heating, or other fixtures temporarily attached for purposes of display or demonstration.

(2) The cost of specially provided foundations not intended to outlast the machinery or apparatus for which provided, and the cost of angle irons, castings, etc., installed at the base of an item of equipment, shall be charged to the same account as the cost of the machinery, apparatus, or equipment.

(3) When furnaces and boilers are used primarily for furnishing steam for some particular department and only incidentally for furnishing steam for heating a building and operating the equipment therein, the entire cost of such furnaces and boilers shall be charged to the appropriate plant account, and no part to the building account.

(4) Minor buildings and structures may be considered a part of the facility in connection with which constructed or operated and the cost thereof accounted for accordingly when the nature of the structure and facility indicates the correctness of such accounting.

## 11. Equipment

A. "Equipment," as used in this system of accounts, means all tangible utility plant, other than land and structures as herein defined.

B. The cost of equipment, unless otherwise indicated in the text of an equipment account, includes, in addition to the actual price thereof, sales taxes, investigation and inspection expenses necessary to such purchase, expenses of transportation when borne by the utility, labor employed, materials and supplies consumed, and expenses incurred by the utility in unloading and placing the equipment in readiness to operate.

C. Exclude from equipment accounts hand and other portable tools which are likely to be lost or stolen or which have relatively small value ($10 or less) or short life, unless the correctness of the accounting therefor is verified by current inventories. Special tools acquired and included in the purchase price of equipment shall be included in the appropriate plant account. Portable drills and similar tool equipment when used in connection with the operation and maintenance of a particular plant or department, such

as production, transmission, distribution, etc., or in "stores," shall be charged to the plant account appropriate for their use.

48 D. The equipment accounts shall include angle irons and similar items which are installed at the base of an item of equipment, but piers and foundations which are designed to be as permanent as the buildings which house the equipment, or which are constructed as a part of the building, and which cannot be removed without cutting into the floors or the walls of the building, shall be included in the building accounts.

E. The equipment accounts shall include all the necessary costs of testing or running a plant or part thereof during an experimental or test period prior to becoming available for service. The accounting utility shall furnish the Commission with full particulars of and justification for any test or experimental run extending beyond a period of 30 days.

F. The cost of efficiency or other tests made subsequent to the date equipment becomes available for service shall be charged to the appropriate expense accounts, except that tests to determine whether equipment meets the specifications and requirements as to efficiency, performance, etc., guaranteed by manufacturers, made after operations have commenced and within the period specified in the agreement or contract of purchase, may be charged to the appropriate gas plant account.

### 12. Additions and Retirements of Gas Plant

A. For the purpose of avoiding undue refinement in accounting for additions to and retirements and replacements of gas plant, all property shall be considered as consisting of (1) retirement units and (2) minor items of property.

B. *Retirement units.*—Each utility shall adopt the List of Retirement Units contained in Appendix I of this system of accounts for use in accounting for additions to and retirements and replacements of gas plant.

(1) When a retirement unit is added to gas plant, the cost thereof shall be added to the appropriate gas plant account, except that when retirement units are acquired in the acquisition of any gas plant constituting an operating system, they shall be accounted for as provided in Gas plant instruction 4.

(2) When a retirement unit is retired from gas plant, with or without replacement, the book cost thereof shall be credited to

the gas plant account in which it is included, determined in the determined in the manner set forth in paragraph D, below. If the retirement unit is of a depreciable class, the book cost of the unit retired and credited to gas plant shall be charged to the depreciation reserve provided for such property. (See par. G, below, and Gas plant instruction 13.)

C. *Minor items of property.*—(1) When a minor item of property which did not previously exist is added to plant, the cost thereof shall be accounted for in the same manner as for the addition of a retirement unit, as set forth in paragraph B(1), above, if a substantial addition results, otherwise the charge shall be to the appropriate operating expense account.

(2) When a minor item of property is retired and not replaced, the book cost thereof shall be credited to the gas plant account in which it is included; and, in the event the minor item is a part of depreciable plant, the depreciation reserve shall be charged with the book cost and cost of removal and credited with
49 the salvage. If, however, the book cost of the minor item retired and not replaced has been or will be accounted for by its inclusion in the retirement unit of which it is a part when such unit is retired, no separate credit to the property account is required, when such minor item is retired.

(3) When a minor item of depreciable property is replaced independently of the retirement unit of which it is a part, the cost of replacement shall be charged to the maintenance account appropriate for the item, except that if the replacement effects a substantial betterment (the primary aim of which is to make the property affected more useful, more efficient, of greater durability, or of greater capacity), the excess cost of the replacement over the estimated cost at current prices of replacing without betterment shall be charged to the appropriate gas plant account.

D. *Determination of book cost.*—The book cost of gas plant retired shall be the amount at which such property is included in the gas plant accounts, including all components of construction costs. The book cost shall be determined from the utility's records and if this cannot be done, it shall be estimated. When it is impracticable to determine the book cost of each item, due to the relatively large number or small cost thereof, the average book cost of the items, with due allowance for any differences in size and character, shall be used as the book cost of the items retired.

E. *Land retired.*—The book cost of land retired shall be credited to the appropriate land account. If the land is sold, the difference

between the book cost (less any reserve therefor which has been authorized and provided) and the sale price of the land (less commissions and other expenses of making the sale) shall be credited to Account 401, Miscellaneous Credits to Surplus, or debited to Account 414, Miscellaneous Debits to Surplus, as appropriate. If the land is not used in gas service but is retained by the utility, the book cost shall be charged to Account 100.4, Gas Plant Held for Future Use, or Account 110, Other Physical Property, as appropriate.

F. *Gas plant sold.*—When gas plant constituting an operating unit or system is sold, conveyed, or transferred to another by sale, merger, consolidation, or otherwise, the book cost of the property sold or transferred to another shall be credited to the appropriate gas plant accounts, including amounts carried in Account 100.5, Gas Plant Acquisition Adjustments, and the amounts (estimated if not known) carried with respect thereto in the depreciation and amortization reserve accounts and in Account 241, Customers' Advances for Construction, and Account 265, Contributions in Aid of Construction, shall be charged to such reserves and accounts. Unless otherwise ordered by the Commission, the difference, if any, between (a) the net amount of debits and credits and (b) the consideration received for the property (less commissions and other expenses of making the sale) shall be included in Account 414, Miscellaneous Debits to Surplus, or Account 401, Miscellaneous Credits to Surplus, as appropriate. (See Account 392, Gas Plant Sold.)

G. The service value of gas plant retired, which is subject to charges for depreciation, shall be charged in its entirety to Account 250.1, Reserve for Depreciation of Gas Plant. Any amounts which by approval or order of the Commission are charged to Account 141, Extraordinary Property Losses, shall be credited to Account 250.1, Reserve for Depreciation of Gas Plant.

H. The accounting for the retirement of amounts included in Account 302, Franchises and Consents, and Accounts 303, Miscellaneous Intangible Plant, and the items of limited-term interests in land included in the accounts for land and land rights, shall be as provided in the text of Account 250.2, Reserve for Amortization and Depletion of Producing Natural Gas Land and Land Rights, and Account 503.2, Amortization and Depletion of Producing Natural Gas Land and Land Rights, or Account 251, Reserve for Amortization of Other Limited-Term

Gas Investments, and Account 504, Amortization of Other Limited-Term Gas Investments, as appropriate.

I. Additions and retirement of gas plant shall not be netted in the entries or in the posting of the entries.

### 13. Work Order System Required

A. All changes in gas plant (except the purchase or sale of gas plant constituting an operating unit or system) shall be recorded by means of work orders or job orders. Separate work orders may be opened for additions to and retirements of gas plant or the retirements may be included with the construction work order, provided, however, that all items relating to retirements shall be kept distinctly separate from those relating to construction, and provided further, that any maintenance costs involved in the work shall likewise be kept distinctly separate.

B. Each utility shall keep its work order system in such manner as to show the nature of each addition to or retirement of gas plant, the total cost thereof, the source or sources of costs, and the gas plant account or accounts to which charged or credited. Work orders covering jobs of short duration may be cleared monthly.

### 14. Transfers of Property

When property consisting of one or more retirement units is transferred from one account for gas plant to another or to Account 110, Other Physical Property, from one utility department to another, such as from gas to electric, from one operating division or area to another, to or from Account 100.1, Gas Plant in Service, Account 100.2, Gas Plant Leased to Others, and Account 100.4, Gas Plant Held for Future Use, the transfer shall be recorded by transferring the book cost thereof from the one account, department, or location to the other, and likewise any related amounts carried in Account 100.5, Gas Plant Acquisition Adjustments, in the depreciation reserve, and other accounts shall be transferred in accordance with the segregation of such reserves and other accounts.

Note.—Amounts included in Account 250.3, Reserve for Abandoned Leases, shall not be related to a particular lease and, therefore, shall not be transferred under the provisions of this instruction.

## 15. Common Utility Plant

A. If the utility is engaged in more than one utility service, such as electric, gas, and street railway, and any of its utility plant is used in common for several utility services or for other purposes to such an extent and in such manner that it is impracticable to segregate it by utility services currently in the accounts, such property may, but only with the approval of the Commission, be designated and classified as "Common Utility Plant."

51 B. Utility plant designated as common utility plant shall be classified according to the detailed utility plant accounts appropriate for the property.

C. The utility shall be prepared to show at any time and to report to the Commission annually, or more frequently if required, and by utility plant accounts (301 to 392), the following: (1) The book cost of common utility plant, (2) the allocation of such cost the respective departments using the common utility plant, and (3) the basis of the allocation.

D. The depreciation, amortization, and depletion reserves of the utility shall be so segregation as to show the amount of each reserve applicable to the property classified as common utility plant.

E. The expenses of operation, maintenance, depreciation, amortization, and depletion of common utility plant shall be recorded in the accounts prescribed herein, but designated as common expenses, and the allocation of such expenses to the departments using the common utility plant shall be supported in the same manner as the allocation of the cost of such property.

## 16. Transmission and Distribution Plant

For the purpose of this system of accounts:

A. "Transmission system" means the land, structures, mains, valves, meters, boosters, regulators, tanks, compressors, and their driving units and appurtenances and other equipment used primarily for transmitting gas to a particular municipality or distribution system. The transmission system begins at the outlet side of the valve at the connection between the gathering lines or other source of supply and inlet to the transmission compressor station or other gathering terminals, and includes the equipment at such connection that is used to bring the gas to transmission pressure.

and ends at the inlet side of the equipment with meters or regulates the entry of gas into the distribution system. It does not include storage land or structures.

B. "Distribution system" means the mains which are provided primarily for distributing gas within a distribution area or for connecting two or more districts within a distribution area, together with land, structures (other than storage land and structures), valves, regulators, services, and measuring devices. The distribution system begins at the inlet side of the equipment which meters or regulates the entry of gas into the distribution system, and ends with, and includes, property on the customers' premises.

[Pages 72 to 171 omitted.]

1 **EXHIBIT NO. 76.—GAS PLANT, ADDITIONS AND RETIREMENTS, DEPRECIATION AND DEPLETION FOR THE YEAR ENDED DECEMBER 31, 1939, F. P. C. WITNESS DUNN**

## WRITTEN STATEMENT

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices, or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Natural Gas Company has been made and, as a result, this report on the 1939 plant additions and retirements and depreciation and depletion is submitted.

This report is a supplement to the original cost report and the depreciation and depletion report. It is submitted in order to show the effect of 1939 changes. The examiners did not make a detailed examination of the cost of additions and retirements, but did make such analysis as was necessary to group the property changes according to the depreciable and depletable classifications which are set forth in the exhibits as of December 31, 1938, and continued in this exhibit as set forth in Schedule No. 1.

SUMMARY OF PLANT CHANGES (EXCLUSIVE OF DISTRIBUTION PLANT)

| | |
|---|---|
| Gas plant in service Dec. 31, 1938 | $51,207,620.64 |
| 1939 plant additions | 699,548.75 |
| 1939 plant retirements | (808,145.67) |
| Gas plant in service, Dec. 31, 1939 | 51,099,023.72 |
| Balance in depreciation and depletion reserves as at Dec. 31, 1938 | 23,501,355.80 |
| 1939 provision—add | 1,290,825.07 |
| 1939 net charge—deduct | (720,013.70) |
| Balance in depreciation and depletion reserves as at Dec. 31, 1939 | 24,072,167.17 |
| Net original cost at Dec. 31, 1939 | 27,026,856.55 |

2 PLANT ADDITIONS—YEAR 1939

The gross increase in Fixed Capital assets during the year ended December 31, 1939, amounted to $1,179,896.75 which amount is shown by accounts, by Schedule No. 6. For purposes of applying the depreciation and depletion rates the amount of $694,469.97, representing the additions to Production, Transmission, and General Plant, excluding nondepreciable items, was used. This latter amount is shown, by accounts, in Column (b) of Schedule 1.

Beginning January 1, 1939, Hope Natural Gas Company changed an accounting policy it had followed consistently from the beginning of operations, a period of forty years, which practice concerns the capitalization of general administrative expenses. The company did not capitalize such costs prior to January 1, 1939.

During the year, 1939, an amount of $79,438.56 was transferred from general and administrative expenses and included in plant accounts. This amount was determined by applying the percentages shown below, as described in Statement F of Exhibit 20:

| | |
|---|---|
| Payroll | 1.2% |
| Purchasing | 3.2% |
| General | 5.9% |
| Land | 3.1% |
| Property Purchased | ¼ of 5.9% |

The average rate for overheads on general construction expenditures, excluding leaseholds, is about 7.6% for the year 1939.

The examiners of accounts have not adjusted the general and administrative expenses capitalized in 1939.

An amount representing interest during construction has been capitalized by the company during the year 1939 and cred-
3 ited to an income account, Interest during Construction—Cr., in the amount of $7,355.85. (See Schedule No. 1 of Income Statement.)

PLANT RETIREMENTS—YEAR 1939

The retirements recorded during the year 1939 amounted to $1,001,162.11 which amount is shown, by accounts, in Column (e) of Schedule No. 6. Certain adjustments, set forth in Column (f), have been made by the examiners to the recorded retirements for the following reasons:

1. As a result of the physical inventory and original cost studies, certain unrecorded retirements were noted as of December 31, 1938. Such retirements were given effect to in the original cost exhibits

although not entered on the books until 1939. To avoid duplication such retirements are eliminated from the 1939 figures.

2. The original cost studies corrected the book cost of many items of property. The 1939 retirements were recorded at book cost and the examiners have made the necessary corrections to retire property at the adjusted original cost.

The above-mentioned examiners' adjustments are shown in Column (f) of Schedule No. 6. For purpose of computing 1939 depreciation expense, the amount of $807,938.44, representing retirements of Production, Transmission and General Plant, is used. This amount, by accounts, is shown in Column (c) of Schedule No. 1.

## Depreciation and Depletion Provisions—1939

The annual expense for depreciation and depletion, for the year 1939, has been computed in the same manner as the expense for preceding years. Data on gas produced and remaining gas reserves are taken from the Geologists' report and service lives
4 are the same as those used in the report on Depreciation and Depletion as at December 31, 1938.

Details of depletion by production areas are shown in Schedules Nos. 2, 3, 4, and 5. Depreciation details are shown in Schedule No. 1.

## Net Charges to Reserves—Year 1939

The reserve charges as shown in Column (g) of Schedule No. 1 and developed in Columns (b) and (c) of Schedule No. 1-A, are determined from two different sources, but are tied in with the net charges to the reserve as reflected by Company Statement, Schedule No. 7-A.

The Company statement sets forth the net charges to the reserve in the amounts and classifications as shown in Column (a) of Schedule No. 1-A.

Certain analyses were made, by the Federal Power Commission accountants, of the plant accounts and retirements for the property grouped under the classifications of Right-of-Way and Field Line Labor, Operated Acreage, Gas Well Construction, and Cost of Abandoning Gas Wells. The reserve charges as developed by these analyses were applied to those property classifications. The charges for Drilling and Cleaning Equipment were shown segregated in the Company statement and were so applied. The re-

maining charges to Production System Property have been allocated to the two classifications—Production System Structures, and Field Line Material and Station Equipment.

Schedule No. 7–A shows charges applicable to Gas Well Equipment in the amount of $233,958.91 which includes the cost of abandoning gas wells. Since the cost of abandoning gas wells has been separately provided for, the cost thereof in the amount of $75,324.15 is deducted from $233,958.91 to arrive at the charge for Gas Well Equipment, exclusive of the cost of abandoning gas wells, namely, $158,634.76.

The loss on property retired, as developed by the analysis of the plant accounts and retirement work orders, for the Gas Well Construction and Operated Acreage classifications is not exactly the same as shown by Schedule No. 7–A. This difference, shown in Column (d), Schedule No. 1–A, is due to the fact that certain retirement work orders, as far as the Company statement was concerned, remained in Account 144, Retirement Work in Progress.

Other charges shown by Company statement were grouped according to Transmission Plant, General Plant, and Other Property.

WASHINGTON, D. C. *April 16, 1941.*

EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*
CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

HOPE NATURAL GAS CO.

*Summary of plant and depreciation and depletion reserves balances for the year ended Dec. 31, 1939*

| Particulars | Plant | | | Depreciation and depletion reserves | | | | | Net plant balances Dec. 31, 1939 |
|---|---|---|---|---|---|---|---|---|---|
| | Balance Dec. 31, 1938 | Year 1939 | | Balance Dec. 31, 1939 | Balance Dec. 31, 1938 | Year 1939 | | Balance Dec. 31, 1939 | |
| | | Additions | Retirements | | | Provision | Charges | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| **Natural gas production plant:** | | | | | | | | | |
| R-of-W and field line labor | $4,267,884.05 | $84,712.89 | $40,273.36 | $4,312,320.58 | $2,434,126.44 | $103,157.93 | $40,096.30 | $2,497,188.07 | |
| Structures | 212,327.73 | 4,333.00 | 6,267.13 | 210,393.60 | 93,311.05 | 8,813.75 | | | |
| Field line material and station equipment | 7,934,169.06 | 82,994.07 | 129,311.41 | 7,887,851.72 | 3,845,567.26 | 175,624.42 | 132,095.96 | 3,991,220.52 | |
| Operated acreage | 1,399,004.86 | | 28,813.03 | 1,370,191.83 | 970,838.83 | 36,772.47 | 28,813.03 | 978,798.27 | |
| Gas well equipment | 7,610,509.75 | 76,995.59 | 219,386.61 | 7,468,118.73 | 4,382,702.79 | 188,482.85 | 158,634.76 | 4,412,550.88 | |
| Gas well construction | 4,089,177.71 | 104,109.66 | 105,008.05 | 4,088,480.32 | 1,100,128.63 | 182,755.43 | 105,098.05 | 1,177,811.01 | |
| Cost of abandoning gas wells | | | | | 2,107,261.03 | 69,813.58 | 75,324.15 | 2,101,750.46 | |
| Drilling and cleaning equipment | 595,692.71 | 89,223.81 | 53,902.56 | 625,013.96 | 351,654.75 | 18,374.78 | 35,895.81 | 335,023.72 | |
| Total natural gas production plant | 26,309,062.87 | 436,369.02 | 583,052.15 | 26,162,379.74 | 15,285,615.78 | 783,795.21 | 575,068.06 | 15,494,342.93 | 10,668,036.81 |
| **Transmission plant:** | | | | | | | | | |
| Mains material, labor, and equipment | 14,561,948.87 | 122,767.32 | 52,886.65 | 14,631,829.54 | 4,179,639.93 | 227,711.47 | | | |
| Structures | 1,456,865.28 | 4,215.70 | 2,159.89 | 1,458,921.09 | 495,831.25 | 36,447.33 | | | |
| Compressor station equipment | 7,683,671.99 | 46,909.83 | 93,283.52 | 7,637,298.30 | 3,103,818.57 | 196,108.42 | | | |
| Total transmission plant | 23,702,486.14 | 173,892.85 | 148,330.06 | 23,728,048.93 | 7,779,289.75 | 460,267.22 | 96,538.03 | 8,143,018.94 | 15,585,029.99 |

## HOPE NATURAL GAS CO.—Continued

*Summary of plant and depreciation and depletion reserves balances for the year ended Dec. 31, 1939*—Continued

| Particulars | Plant | | | Depreciation and depletion reserves | | | | | Net plant balances Dec. 31, 1939 |
|---|---|---|---|---|---|---|---|---|---|
| | Balance Dec. 31, 1938 | Year 1939 | | Balance Dec. 31, 1939 | Balance Dec. 31, 1938 | Year 1939 | | Balance Dec. 31, 1939 | |
| | | Additions | Retirements | | | Provision | Charges | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| General plant: | | | | | | | | | |
| Structures and improvements | 225,887.78 | 4,476.78 | 11,762.16 | 218,602.40 | 66,712.87 | 4,822.72 | | | |
| Office furniture and equipment | 178,683.34 | 11,925.95 | 4,091.00 | 186,518.29 | 63,483.27 | 7,304.04 | | | |
| Other equipment | 115,988.50 | 9,276.59 | 14,208.61 | 111,056.48 | 22,371.23 | 4,052.74 | | | |
| Communication equipment | 248,975.74 | 8,872.60 | 10,914.72 | 246,933.62 | 178,731.69 | 9,546.27 | | | |
| Transportation equipment | 142,314.49 | 49,656.18 | 35,579.74 | 156,390.93 | 105,151.21 | 21,036.87 | | | |
| Total general plant | 911,849.85 | 84,208.10 | 76,556.23 | 919,501.72 | 436,450.27 | 46,762.64 | 48,407.61 | 434,805.30 | 484,696.42 |
| Subtotal | 50,923,398.86 | 694,469.97 | 807,938.44 | 50,809,930.39 | 23,501,355.80 | 1,260,825.07 | 720,013.70 | 24,072,167.17 | 26,737,764.42 |
| Nondepreciable plant: | | | | | | | | | |
| Natural gas producing lands | 3,319.84 | | | 3,319.84 | | | | | |
| Other land and land rights | 21,008.52 | | 207.23 | 20,801.29 | | | | | |
| Transmission land | 162,912.21 | 900.00 | | 163,812.21 | | | | | |
| General plant land and land rights | 96,981.21 | 4,178.78 | | 101,159.99 | | | | | |
| Total nondepreciable plant | 284,221.78 | 5,078.78 | 207.23 | 289,093.33 | | | | | 289,093.33 |
| Total gas plant in service (exclusive of distribution plant) | 51,207,620.64 | 699,548.75 | 808,145.67 | 51,099,023.72 | 23,501,355.80 | 1,260,825.07 | 720,013.70 | 24,072,167.17 | 27,026,856.55 |

[Pages 7 to 17 omitted.]

## HOPE NATURAL GAS COMPANY

*Summary of depreciation and depletion reserves for the year 1939—per books*

| | Reserve accounts | Reserve balance Jan. 1, 1939 | Additions | | | Deductions | | | Balance before merger Dec. 31, 1939 | Acquired from Reserve Gas Co. | Balance Dec. 31, 1939 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Charged to expense | Other credits | Total | For property retired | Other debits | Total | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
| 250.1 | Depreciation of utility plant | $39,912,414.89 | [1] $1,300,000.00 | [2] $43,677.45 | $1,343,677.45 | $721,300.58 | $489,000.00 | $1,210,300.58 | $39,945,791.76 | $3,971,346.43 | $43,917,138.19 |
| 250.2 | Amortization and depletion of producing natural gas lands and land rights | 489,034.48 | 18,400.00 | [3] 489,000.00 | 507,400.00 | 23,214.26 | | 23,214.26 | 973,220.22 | 816,382.44 | 1,789,602.66 |
| 250.3 | Abandoned leases | 231,299.52 | | | | 23,067.31 | | 23,067.31 | 208,232.21 | 31,911.39 | 240,143.60 |
| 251 | Amortization of other limited term utility investment | 813.44 | 6,369.47 | | 6,369.47 | | | | 7,182.91 | | 7,182.91 |
| 253 | Amortization and depreciation of other property | 80,456.25 | 6,631.20 | | 6,631.20 | | | | 87,087.45 | | 87,087.45 |
| 258.6 | Other reserves—Clarksburg Light & Heat Company | 45,431.90 | 4,740.72 | | 4,740.72 | | | | 50,172.62 | | 50,172.62 |
| | Total | 40,759,450.48 | 1,336,141.39 | 532,677.45 | 1,868,818.84 | 767,582.15 | 489,000.00 | 1,256,582.15 | 41,271,687.17 | 4,819,640.26 | 46,091,327.43 |

[1] Estimated on basis of Rhodes depreciation rates.

[2] Charged to clearing accounts.

[3] No depletion was set up for operated acreage prior to 1921, therefore the reserve is understated. The reserve for depreciation of utility plant (account 250.1) is thought to be overstated. To adjust the reserve account 250.2, a transfer of $489,000 was made to that account from account 250.1.

[Page 19 omitted.]

18 **EXHIBIT NO. 117.—UNIFORM CLASSIFICATION OF ACCOUNTS FOR NATURAL GAS COMPANIES PRESCRIBED BY THE PUBLIC SERVICE COMMISSION OF WEST VIRGINIA (1923)**

[Pages 1–17 omitted]

## I. FIXED CAPITAL ACCOUNTS

100. Fixed Capital Installed Prior to January 1, 1923.

Charge to this account the book value, at the close of December 31, 1922, of all fixed capital owned and used by the utility in the conduct of its natural gas operations. No charge shall be made to this account for any fixed capital acquired after December 31, 1922.

When any item of fixed capital carried in this account is retired from service, credit to this account the amount at which it is carried herein, charge to the appropriate sub-account of "121. Materials and Supplies" account any salvage recovered from it; charge to "183. Depreciation Of Structures And Equipment Reserve" account the amount reserved from January 1, 1923, to provide for the loss suffered by it since that date from wear, tear, obsolescence, etc.; charge to the reserve account provided prior to January 1, 1923, the accumulated amount reserved at the close of December 31, 1922, to provide for like loss suffered by it; and charge either to "709. Amortization Unprovided For Elsewhere" or to "131. Property Abandoned" account, as the Public Service Commission may direct, the net loss sustained on it.

The charge to "131. Property Abandoned" account shall be made on the basis of the money cost of such fixed capital less the amount of salvage recovered therefrom and the amount reserved for depreciation thereof.

Any excess of the amount at which such retired fixed capital is carried in this account over its money cost shall be charged to "709. Amortization Unprovided For Elsewhere" account.

This account is a controlling account of the various accounts that were combined on January 1, 1923, to make it.

[Pages 19 to 144 omitted.]

## EXHIBIT NO. 98.—PRINCIPAL PROPERTY PURCHASES, 1898–1938, AND HOW THESE PURCHASES WERE RECORDED IN THE COMPANY'S PLANT ACCOUNTS AT THE TIME OF PURCHASE, HOPE WITNESS ANTONELLI

PURCHASES FROM OTHER UTILITIES

| Year | Vendor | Voucher No. | Purchase price | Property recorded in Hope's plant account as follows |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| 1902 | Flaggy Meadow Gas Company | M–61 | $1,174,010.60 | At purchase price. |
| 1908 | Lawrence Natural Gas Company | M–72 | 26,501.93 | At purchase price (less $9,716.41 charged to expense). |
| 1909 | Columbia Gas Company | C–232 | 50,000.00 | At purchase price (less $199.83 charged to expense). |
| | Greenwood Gas Company | G–33 | 7,500.00 | At purchase price (less $855.67 charged to expense). |
| 1910 | Mountain State Gas Company | D–302 | 663,663.98 | At vendor's book cost of $1,298,611.31. The difference between such cost and the purchase price (less $4,181.37 charged to expense) was added to Hope's depreciation reserve. |
| | Home Gas Company | J–371 | 75,000.00 | At purchase price (less $1,886.79 charged to expense). |
| | Flint Natural Gas Company | M–361 | 8,100.00 | At purchase price (less $6,124.65 principally for well drilling charged to expense). |
| | Fayette County Gas Company | G–353 | 600,000.00 | At purchase price (less $130,586.75 principally for well drilling charged to expense). |
| 1911 | Burt Oil Company | G–429 | 7,500.00 | At purchase price. |
| | Light Fuel & Power Company | M–413 | 16,038.88 | At purchase price. |
| | Manufacturers Light & Heat Company | H–411 | 1,050,000.00 | At purchase price (less $1,493.16 charged to expense). |
| 1912 | The Mt. Clare Gas Company | L–109 | 17,500.00 | At purchase price. |
| 1917 | Rural Gas Company | M–368 | 45,000.00 | At purchase price (less $8,386.61 charged to expense). |
| 1921 | Pittsburgh & West Virginia Gas Company | C–83<br>F–160<br>J–8 | 9,200.00 | At purchase price (less $44.98 charged to expense). |
| 1925 | Keeners Oil, Natural Gas & Fuel Company | K–30 | 112,000.00 | At purchase price. |
| 1928 | Light, Fuel & Power Company (Welwood) | C–226 | 80,000.00 | At purchase price. |
| 1929 | Glenville Natural Gas Company | E–175 | 17,304.13 | At purchase price. |
| | Godfrey L. Cabot, Inc | M–351 | 700,000.00 | At purchase price. |

# EXHIBIT NO. 98.—PRINCIPAL PROPERTY PURCHASES, 1898–1938, AND HOW THESE PURCHASES WERE RECORDED IN THE COMPANY'S PLANT ACCOUNTS AT THE TIME OF PURCHASE, HOPE WITNESS ANTONELLI—Continued

PURCHASES FROM OTHER UTILITIES—Continued

| Year | Vendor | Voucher No. | Purchase price | Property recorded in Hope's plant account as follows |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| 1929 | Clarksburg Light & Heat Company | F-280 | $1,369,310.67 | At vendor's book cost of $2,233,252.76. The difference between such cost and the purchase price was added to Hope's depreciation reserve. |
| 1932 | Pittsburgh & West Virginia Gas Company | B-12 | 17,000.00 | At purchase price. |
| 1934 | Wak Company | M-250 | 25,000.00 | At purchase price. |
| 1936 | Pittsburgh & West Virginia Gas Company | G-239 | 23,048.54 | At purchase price. |
| 2 1937 | Cumberland & Allegheny Gas Company | K-32 | 8,217.78 | At purchase price. |
| 1938 | Pittsburgh & West Virginia Gas Company | F-42 | 41,280.77 | At purchase price. |

PURCHASES FROM NONUTILITIES

| | | | | |
|---|---|---|---|---|
| 1899 | South Penn Oil Company | M-12 | 95,678.90 | At purchase price. |
| 1902 | South Penn Oil Company | M-48 | 505,500.58 | At purchase price (less $136,984.57 for well drilling charged to expense). |
| | The Carter Oil Company | M-262 | 330,399.03 | At purchase price (less $170,346.63 for well drilling charged to expense). |
| 1906 | South Penn Oil Company | J-150 | 16,722.66 | At purchase price (less $7,655.30 charged to expense). |
| 1911 | Freehold Oil & Gas Company | C-327 | 500,000.00 | At purchase price (less $114.04 charged to expense). |
| | R. G. Gillispie | C-268 | 8,250.00 | At purchase price (less $3,908.28 charged to expense). |
| | West Virginia–Ohio Gas Fuel Company | M-265 | 11,842.57 | At purchase price. |
| 1912 | H. B. Hogg | F-230 | 7,500.00 | At purchase price. |
| 1914 | Ernest Hutton | G-200 | 15,000.00 | At purchase price. |
| 1916 | Morgansville Oil & Gas Company | A-330 | 10,000.00 | At purchase price (less $51.56 charged to expense). |
| | Ross, Davisson & Chidester | K-180 | 40,000.00 | At purchase price (less $5.24 charged to expense). |
| 1917 | Hill Oil & Gas Company | H-354 | 10,000.00 | At purchase price (less $0.83 charged to expense). |
| | Crude Oil Company | J-112 | 93,848.46 | At purchase price (less $2,752.16 charged to expense). |
| | Hill Oil & Gas Company | L-115 | 20,000.00 | At purchase price (less $500.08 charged to expense). |
| | Mrs. Louise Hunt Red. Admx. | M-31 | 32,500.00 | At purchase price. |

| | | | | |
|---|---|---|---|---|
| | Matysh & Wilkins | M-152 | 9,201.61 | At purchase price (less $250.00 charged to expense). |
| | G. H. & J. E. Trainer | L-181 | 17,500.00 | At purchase price (less $504.48 charged to expense). |
| 1918 | M. G. Sperry | L-147 | 16,000.00 | At purchase price (less $2.73 charged to expense). |
| | E. A. Park | H-131 | 10,000.00 | At purchase price. |
| | J. H. Edwards | J-339 | 14,500.00 | At purchase price (less $2.92 charged to expense). |
| | Elk Fuel Company | D-128 | 9,000.00 | At purchase price (less $3.88 charged to expense). |
| | Hiner Oil & Gas Company | D-143 | 10,000.00 | At purchase price (less $5.46 charged to expense). |
| | Clarksburg Manufacturing Gas Company | A-122 | 16,000.00 | At purchase price (less $530.32 charged to expense |
| | Granville Kester | A-151 | 9,000.00 | At purchase price. |
| | C. F. Moran | B-46 | 7,800.00 | At purchase price. |
| 1919 | Marion Oil Company | M-217 | 7,297.13 | At purchase price (less $13.28 charged to expense). |
| | Kanawha Oil Company | D-117 | 10,000.00 | At purchase price (less $96.42 charged to expense). |
| 1920 | Crude Oil Company | F-130 | 42,416.44 | At purchase price (less $4,433.26 for well drilling and $5,513.63 for P. & L. Suspense charged to Expense). |
| 1925 | City of Parkersburg | M-277 | 10,000.00 | At purchase price. |
| | Eastern Carbon Black Company | M-326 | 50,000.00 | At purchase price. |
| | United Carbon Company | M-326 | 12,000.00 | At purchase price. |
| | Shelton Gasoline Company | M-240 | 76,600.00 | At purchase price. |
| 1936 | M. G. Sperry | J-65 | 9,000.00 | At purchase price. |
| | Carter Oil Company | C-294<br>A-257 | 1,626,805.16 | At vendor's book cost of $2,253,214.19. The difference between such cost and the purchase price was added to Hope's depreciation reserve. |
| 1927 | Grasselli Chemical Company | K-54 | 800,000.00 | At purchase price. |
| 1929 | Oakland Oil & Gas Company | L-175 | 32,500.00 | At purchase price. |
| | Norwood Glass Company | J-158 | 7,500.00 | At purchase price. |
| 1930 | Anderson & Company—Worthy Marsh and J. W. Woodell | H-243 | 10,000.00 | At purchase price. |
| | Thomas A. Whelan | L-194 | 30,000.00 | At purchase price. |
| | Carnegie Natural Gas Company | G-226 | 13,627.19 | At purchase price (less $6,470.41 for well drilling charged to expense). |
| 1931 | Midland Natural Gas Company | M-253 | 200,000.00 | At purchase price. |
| 1932 | Midland Natural Gas Company | D-10 | 8,500.00 | At purchase price. |
| 1934 | Godfrey L. Cabot, Inc. | M-250 | 2,465,000.00 | At purchase price. |
| | Hazel-Atlas Glass Company | K-171 | 52,000.00 | At purchase price. |
| 1936 | H. F. McCue | M-288 | 12,750.00 | At purchase price. |
| 1938 | Jacobs Property | G-185 | 25,987.00 | At purchase price. |
| | Hamilton Gas Corporation | M-229 | 75,000.00 | At purchase price. |

4 **EXHIBIT NO. 73.—COMPARISON OF REPRODUCTION COST NEW OF LINE PIPE, AS OF DECEMBER 31, 1938, INCLUDED IN HOPE NATURAL GAS COMPANY'S EXHIBIT 16D, WITH ACTUAL LINE PIPE COSTS PREVAILING DURING THE YEAR 1939, F. P. C. WITNESS BODNER**

[Pages 1 to 3 omitted]

## WRITTEN STATEMENT

Hope Natural Gas Company's Exhibit 16–D, pages 259–268, presents an estimate of the reproduction cost new of Account 358, Mains of Hope Natural Gas Company, as of December 31, 1938.

### Pipe Costs

Exhibit 16–A, page 22, and the underlying working papers relating to the development of the unit costs for pipe lines, show that the prices for line pipe (and casing used as line pipe) contained in Exhibit 16–D, page 261, are based on manufacturers' quoted prices as of December 31, 1938, less ten percent large users' discount less two percent cash discount, with an additional deduction of ten percent of the net discounted price as an allowance obtainable on large tonnage purchases. (See also T. p. 738.)

The records of Hope Natural Gas Company (which are substantially in agreement with pipe quantities given in Exhibit 16–D, page 261) indicate that there are approximately 98,500 tons of plain-end steel lapweld line pipe and casing in transmission pipe lines of the company as of December 31, 1938 (exclusive of line pipe and casing used as protective casing).

5 Pricing of a large tonnage of steel pipe such as in the Hope Natural Gas Company system on a reproduction cost new basis involves the determination of prevailing prices for large quantity purchases of pipe. In view of this, the pipe costs experienced by natural gas companies that had large pipeline construction activity were used as the basis for this exhibit.

During the year 1939 major gas pipeline projects were constructed by a number of natural gas companies. Several of these companies have submitted to the Commission, upon request, com-

plete data concerning the quantity and type of pipe purchased and the prices paid therefor. Copies of purchase orders and copies of typical invoices for steel line pipe purchased for major gas pipeline construction during the year 1939 were furnished by Northern Natural Gas Company, United Gas Pipe Line Company, El Paso Natural Gas Company, Michigan Gas Transportation Corporation; and a sworn statement of transmission line costs was filed by Louisiana-Nevada Transit Company. These data are available in the working papers underlying this exhibit.

The information furnished by these five natural gas companies for pipe sizes 8⅝" O. D. to 24" O. D. was analyzed and summarized. The purchases so summarized covered more than 625 miles of line pipe, with a total weight of approximately 64,000 tons, and a cost of approximately $2,750,000. Practically
6 all this pipe was double random lengths varying between 30 to 49 feet per joint. All of this pipe was either seamless or electric-weld line pipe and the prices were higher than the price of new lapweld pipe. Lapweld pipe has been used in practically all of the transmission pipelines of the Hope Natural Gas Company system.

The pipe information compiled on the 1939 purchases made by the five companies was grouped on a weighted average basis into the following classifications:

1. Pipe with a diameter of 10¾" O. D. to 24" O. D.
2. Pipe with a diameter of 8⅝" O. D.

The first classification is based on the fact that United Gas Pipe Line Company purchased approximately 21,500 tons of seamless steel pipe, in sizes varying from 10¾" O. D. to 22" O. D. at a single price of $43.00 per ton at Lorain, Ohio, at the time it built its Monroe-Jackson line.

The weighted average price of the approximately 57,200 tons of seamless and electric weld line pipe of the first classification (10¾" O. D. to 24" O. D.), purchased by the companies studied is $42.63 per ton net f. o. b. Lorain, Ohio. The weighted average price of approximately 7,200 tons of seamless and electric weld
7 line pipe of the second classification (8⅝" O. D.) purchased by these companies is $48.98 per ton net f. o. b. Lorain and Youngstown, Ohio. The prices paid for the different sizes of pipe vary from a minimum of $39.20 per ton net f. o. b. Lorain, paid by Michigan Gas Transmission Corporation for approximately 1,750 tons of 24" O. D. pipe, to a maximum of $64.30 per ton net f. o. b. Lorain, paid by Northern Natural Gas Company

for about 95 tons of 20" O. D. pipe. The weighted average prices developed, therefore, reflect purchases in both small and large amounts, but are influenced primarily by the large tonnage purchases.

The publication, "The Iron Age" shows that the published prices for lapweld steel pipe f. o. b. Pittsburgh District and Lorain, Ohio, mills, remained the same during the period from July 1, 1938, through December 31, 1939, and into part of 1940. According to the written statement of Mr. G. I. Rhodes (page 14 of Exhibit 16-A) the level of material prices during the winter of 1938-1939, which he used, remained substantially the same through the early part of 1940. In view of this it is considered that the prevailing actual prices for steel line pipe during the year 1939 may properly be compared with the quoted prices used in the Hope Natural Gas Company's estimate of reproduction cost new as of December 31, 1938.

This exhibit compares the net quoted prices of line pipe f. o. b. (Pittsburgh District, Youngstown or Lorain) mill as included in Hope Natural Gas Company's Exhibit 16-D, page
8 261, with the weighted average actual purchase price of seamless and electric-weld steel line pipe developed from the purchase records of the five natural gas companies previously mentioned.

The weighted average actual purchase prices of seamless and electric-weld steel line pipe used in compiling the data in this exhibit have not been reduced for the purposes of this exhibit to a price for lapweld steel line pipe, even though it is known that lapweld steel line pipe costs less per ton than comparable seamless and electric-weld steel line pipe. Had such price differential been considered in this exhibit, the comparison would show a greater difference between quoted and actual prices than has been reflected.

9 CONCLUSION

The Hope Company's net quoted price f. o. b. McKeesport, Youngstown, or Lorain (or other parts of Pittsburgh District), for plain end steel line pipe as of December 31, 1938, included in Exhibit 16-D, page 261, is substantially higher than the prices paid for similar steel line pipe by the five natural gas companies previously mentioned. This price difference is shown in detail on Table 1 and can be summarized as follows:

| Description | Line pip |
|---|---|
| 1. Hope Company's net total quoted price f. o. b. mill McKeesport, Youngstown, or Lorain (or other parts of Pittsburgh District) | 85,667,15 |
| 2. F. P. C. net total cost f. o. b. Youngstown and Lorain | 4,207,70 |
| 3. Difference | 1,459,45 |
| 4. Percent difference | 34.6 |

Signed MICHAEL J. BODNER,
Michael J. Bodner.

Date, March 24, 1941, Washington, D. C.

[Pages 10 to 11 omitted.]

1 **EXHIBIT NO. 73-A.—COMPARISON OF UNIT REPRODUCTION COST NEW PER FOOT FOR THE INSTALLATION (INCLUDING ALL OVERHEADS) OF LINE PIPE USED IN "REPRODUCTION COST NEW OF COMPANY PROPERTIES AS OF DECEMBER 31, 1938" WITH ACTUAL AVERAGE UNIT COSTS AS EXPERIENCED BY HOPE NATURAL GAS COMPANY AND ANOTHER COMPANY DURING YEARS 1937, 1938, 1939, AND 1940, F. P. C. WITNESS BODNER**

## WRITTEN STATEMENT

### INTRODUCTION

This exhibit presents a comparison of the Reproduction Cost New Unit Cost per Foot as of December 31, 1938, for the Installation of new steel line pipe (and casing used as line pipe), sizes $1\frac{5}{16}$" O. D., $1\frac{29}{32}$" O. D. to 26" O. D. included in Company's Exhibit 16-C, pages 107 and 108, Exhibit 16-D, pages 260 and 261, together with Exhibit 16-A, page 35 (showing the undistributed construction costs) with Actual Costs experienced by the Hope Natural Gas Company and the Manufacturers Light & Heat Company, during years 1937, 1938, 1939, and 1940.

Actual pipe line installation costs for the years 1937, 1938, 1939, and 1940 were used in this exhibit for the reason that cost of the pipeline installations just preceding and subsequent to the date of the Company's claimed valuation would be expected to compare most closely with the costs that would be expected to be incurred on date of the estimated reproduction cost valuation submitted by the Company in these proceedings.

2 The cost of installation of pipelines as referred to in this exhibit includes the total cost for all of the Components of Construction Cost for pipelines exclusive of the direct material cost of pipe, couplings, fittings, valves and such materials which remain as a part of the completed construction. Being the cost of construction, it does not contain any costs applicable to the lands or land rights utilized by the pipeline.

Company Exhibit 16A, at pages 22, 23, 24, 25, 29, 30, and 31, the transcript of the oral testimony of Mr. George I. Rhodes at

pages 635, 636, 637, 638, and 730, and the underlying working papers supporting the computation of the average unit installation cost for pipelines, indicate that such units in Exhibit 16C, at pages 107 and 108 for Account 333-1, Field Lines, Exhibit 16D, at pages 260 and 261 for Account 353, Mains, and Exhibit 16A, at page 35 showing additional expenditures related to undistributed construction costs, are not derived from actual pipeline installation costs experienced by the Hope Natural Gas Company translated to reflect costs prevailing during the period of the claimed valuation. An inspection of the working papers
3 underlying these unit costs does not disclose that such costs are derived from or may be related to the installation of any gas pipelines anywhere. Also the Company has not made available for examination any analyses reflecting actual costs of construction of any gas pipelines upon which those costs may have been based or predicated. In addition, no studies showing the derivation of the labor performances, the supervision or the overhead percentages adopted by the Company for any of the components of the installation cost of steel line pipe have been made available.

METHOD

The installation costs for $1\frac{5}{16}$" O. D., $1^{29}\frac{}{32}$" O. D. to 16" O. D. steel line pipe as contained in the 1938 "Reproduction Cost New" estimate of Mr. Rhodes for the Company have been analyzed and are presented in this exhibit in such manner that a direct comparison may be made between the unit cost included in his estimate and the actual costs experienced by the Hope Natural Gas Company and another company. For the purpose of this exhibit it has been unnecessary to consider the composition of the unit costs or relative proportions of the several com-
4 ponents entering into the total cost determined for each size and kind of pipe, but only to segregate the material cost from the installation cost in accordance with the definition given above. Tables 3 and 4 in this exhibit explain the details of the method used in developing the total unit installation costs of steel line pipe included in Mr. Rhodes' Reproduction Cost New estimate in order to make a direct comparison of such units with actual costs.

Actual installation costs and line pipe lengths for the laying of new field and transmission pipelines has been obtained from three sources and are included in this exhibit as follows:

(a) Installation cost data for all new pipelines ($15/16$" O. D. to 16" O. D.) installed in 1937 and 1938 (completed in 1937 and 1938) by the Hope Natural Gas Company were transcribed from the construction cost analyses of the Commission accounting examiners as determined in their study of the "Original Cost of Gas Plant as of December 31, 1938." The pipe footages for the pipelines were transcribed from the equipment cost analyses of the Commission accounting examiners as determined in the above-mentioned exhibit.

5 (b) Installation cost data for all new lines installed in 1939 and 1940 by Hope Natural Gas Company were taken from the closed construction work orders made available by the Company. All costs shown in those work orders, exclusive of direct cost of pipe, valves, fittings, and other materials remaining a part of the completed construction and classified by the Company as equipment cost, were included as installation costs. The pipe footage data were transcribed from the same closed work orders and included the pipe lengths shown for the corresponding direct material costs of pipe.

(c) Installation cost data for all new lines installed between March 1938 and December 1940 by Manufacturers Light & Heat Company in the State of West Virginia were copied from the closed construction work orders of that company made available upon request. The installation costs included all of the costs of construction, exclusive of the direct cost of the pipe, fit-

6 tings, valves and other materials remaining as a part of the completed construction, and of course, exclusive of the cost of lands and rights-of-way acquired for the construction of the lines. The pipe footages were transcribed from the same closed work orders and included the pipe lengths shown for the corresponding direct material costs of pipe.

Some of the materials used in the construction of the pipelines analyzed for this exhibit were secondhand or reused materials recovered from previously constructed lines. Although the cost of installation of pipelines using such secondhand materials would be expected to be greater than that which would be incurred using new materials, this fact has not been reflected in this exhibit.

Replacement and line extension jobs have been omitted in this comparison study to avoid the possibility that costs relating to such construction might be distorted by reason of the character of the work.

In determining the actual costs applicable to the installation of minor footages of line pipe of diameter other than the principal diameter involved in the particular job, an amount was
7 segregated for such footage on the basis of the weighted average installation cost experienced in the period by each company for all of the jobs installed of that single diameter. These costs segregated for the minor footages of pipe were then grouped with those lines of the same diameter.

In determining the footage of pipeline installed, certain quantities of pipe of diameters less than $1^{5}/_{16}$" O. D. (used possibly as gauge lines) and minor footages of $8^{1}/_{4}$" and 10" pipe (probably used as protective casing) charged to the job and included in the cost of the pipeline were omitted. Consequently the actual installation costs per foot developed in this exhibit and used for purposes of comparison are higher than would have been reflected, had these additional footages been considered in arriving at the average actual unit costs. Also a considerable portion of the installation cost data obtained from the Manufacturers Light & Heat Company was for the installation of plain-end line pipe in welded pipelines, the installation costs of which are generally higher than the Dresser coupled pipelines of the Hope Company with which they are compared in columns 9 and 11 of Table 1 in this exhibit.

8 The actual average unit installation costs per foot shown in this exhibit are derived from a consideration and combination of costs for both screw-end and plain-end pipeline construction. Separate actual unit installation costs were not determined for these two classes of construction for the records did not indicate the complete information necessary for such a determination. The records of both the Hope Natural Gas Company and the Manufacturers Light & Heat Company did not segregate the exact footage of plain-end pipe laid as Dresser coupled pipeline from that laid as welded pipeline nor did they specify in all instances whether the pipe used was plain-end or screw-end pipe.

The installation costs for all drip assemblies installed by Hope Natural Gas Company during the years 1937 and 1938 in the pipelines included in this exhibit have been included with the construction cost of the pipeline. The installation costs applicable to drip assemblies are included separately as an additional cost in the Company's Reproduction Cost New estimate. (See transcript of testimony of Mr. Rhodes at pages 732 and 733.)

Had the actual installation costs pertaining to the drip assemblies been determined separately in this exhibit and the amounts applicable thereto deducted from the total installation cost of the pipeline, there would have resulted a lower installation cost per foot for the steel line pipe.

The compilation of actual cost data for new pipeline construction has included all jobs (for $1\frac{5}{16}$" O. D., $1^{29}\frac{}{32}$" O. D. to 16" O. D. pipe) whether large or small, but even in the aggregate the footage does not accumulate to a project the size of that which would be encountered were the properties of Hope Natural Gas Company actually being reconstructed. There are savings incident to a large construction project which are not reflected in this exhibit, because the Company experience in pipeline construction cost is piece-meal.

The inclusion of the additional amounts, claimed by the Company above the "Original Cost of Gas Plant as of December 31, 1938" determined by the Commission accounting examiners for new lines constructed in 1937 and 1938 by Hope Natural Gas Company, would reduce the percentage difference shown in this exhibit on an average of approximately 10%. These Company claims are not considered in this exhibit, but are mentioned to show that if such amounts had been included, still there would be a large remaining difference between the installation costs per foot in Reproduction Cost New estimate and actual experienced costs plus such claimed amounts.

The actual installation cost data compiled from the construction costs analyses (for period 1937 and 1938) as determined by the Commission accounting examiners in their study of the "Original Cost of Gas Plant as of December 31, 1938" of the Company and the closed construction work orders of Hope Natural Gas Company and of Manufacturers Light & Heat Company, was analyzed and summarized. The installation costs so summarized covered more than 135 miles of pipeline construction at an installation cost of approximately $304,000.00. The data transcribed from the several records of Hope Natural Gas Company and the Manufacturers Light & Heat Company, together with the development of the data presented in this investigation, are all available from the working papers underlying this exhibit.

## CONCLUSIONS

As a result of this investigation, Table 1 shows the comparison of estimated reproduction cost new unit cost per foot for the installation of steel line pipe (and casing used as line pipe)
11 of $1\frac{5}{16}$", $1\frac{29}{32}$" to 16" outside diameters, as included in the Reproduction Cost New of Company Properties as of December 31, 1938, with actual costs as experienced by the Hope Company and another company during the years 1937, 1938, 1939 and 1940. The figures in columns (8) and (10) are differences determined by comparing the unit installation costs per foot for screw-end pipe, or the highest unit installation costs for pipe sizes over $4\frac{1}{2}$" O. D. as included by the Company in their reproduction cost new estimate, with the actual installation costs as experienced by the two companies. The figures in columns (9) and (11) are likewise differences determined by comparing the unit installation costs per foot for plain-end Dresser-coupled pipe, or the lowest unit installation costs for pipe sizes over $4\frac{1}{2}$" O. D. as included by Mr. Rhodes in his estimate, with the actual installation costs as experienced by Hope Natural Gas Company and Manufacturers Light & Heat Company.

Table 2 shows the actual weighted average installation cost per foot of steel line pipe (and casing used as line pipe) derived from actual construction costs experienced by Hope Natural Gas Company and Manufacturers Light & Heat Company.

Table 3 shows the development of installation costs per
12 foot for lapweld screw-end steel pipe (and casting used as line pipe) as reflected in Mr. Rhodes' reproduction cost new estimate.

Table 4 shows the development of installation costs per foot for lapweld plain-end Dresser-coupled steel line pipe as included in Mr. Rhodes' estimate of reproduction cost new.

It is manifest from this comparison study that the Company's estimate of pipeline unit installation cost, contained in its Reproduction Cost New exhibit, is strikingly higher than such cost actually experienced by the Hope Natural Gas Company and the Manufacturers Light & Heat Company for recent pipeline construction.

(Signed) MICHAEL J. BODNER.
Michael J. Bodner.

Date: April 16, 1941, Washington, D. C.

*Comparison of reproduction cost new unit cost per foot for installation of line pipe (including all overheads on material and labor) as included in reproduction cost new of company properties as of December 31, 1938, with actual costs as experienced by the company and others during years 1937, 1938, 1939, and 1940*

| Diameter (inches) | | Weight per foot (pounds) | | R. C. N. labor cost per foot (including all overheads on material and labor) | | Weighted average actual labor cost per foot (including all overheads on material and labor) | Difference | | Percent difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Screw-end pipe | Plain-end pipe | | Screw-end pipe | Plain-end pipe | Screw-end pipe | Plain-end pipe |
| Outside | Nominal | Screw end | Plain end | | | | (5)−(7) | (6)−(7) | (8)÷(7)×100 | (9)÷(7)×100 |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 1 1/16 | 1 | 1.70 | 1.67 | $0.140 | | $0.173 | *0.033* | | *19.1* | |
| 1 29/32 | 1 1/2 | 2.75 | 2.71 | .171 | | .318 | *.147* | | *46.2* | |
| 2 3/8 | 2 | 3.75 | 3.65 | .260 | $0.356 | .140 | .159 | $0.216 | 113.6 | 154.3 |
| 3 1/2 | 3 | 7.76 | 7.57 | .466 | .509 | .234 | .232 | .275 | 99.1 | 117.5 |
| 4 1/2 | 4 | 11.00 | 10.79 | .568 | .590 | .361 | .207 | .199 | 57.3 | 55.1 |
| 5 1/4 | 4 7/8 "A" | 10.00 | | .726 | | | .365 | | 101.1 | |
| 5 9/16 | 5 | 15.00 | 14.61 | .760 | .701 | | .405 | .346 | 114.1 | 97.5 |
| 5 1/2 | 5 5/16 "A" | 13.00 | 13.00 | .746 | .691 | .355 | .391 | .336 | 110.1 | 94.6 |
| 6 | 5 5/8 "A" | 20.00 | | .765 | | | .438 | | 123.4 | |
| 6 5/8 | 6 | 19.45 | 18.97 | .919 | .821 | | .465 | .367 | 102.4 | 80.8 |
| 6 5/8 | 6 1/4 "A" | 17.00 | 17.00 | .803 | .809 | | .448 | .355 | 98.7 | 78.2 |
| 7 | 6 5/8 "A" | 15.00 | 17.00 | .803 | .809 | .454 | .448 | .355 | 98.7 | 78.2 |
| 7 | 6 5/8 "A" | 20.00 | 20.00 | .922 | .827 | | .468 | .373 | 103.1 | 82.2 |
| 8 5/8 | 8 | | 22.36 | | 1.014 | | | .179 | | 21.4 |
| 8 5/8 | 8 | 25.55 | 24.69 | 1.219 | 1.023 | | .384 | .188 | 46.0 | 22.5 |
| 8 5/8 | 8 | | 27.74 | | 1.041 | .835 | | .206 | | 24.7 |
| 8 5/8 | 8 | 29.35 | 28.55 | 1.243 | 1.045 | | .408 | .210 | 48.9 | 25.1 |
| 8 5/8 | 8 5/8 "A" | 24.00 | 24.00 | 1.209 | 1.020 | | .374 | .185 | 44.8 | 22.2 |

## TABLE 1.—HOPE NATURAL GAS COMPANY, G-113

*Comparison of reproduction cost new unit cost per foot for installation of line pipe (including all overheads on material and labor) as included in reproduction cost new of company properties as of December 31, 1938, with actual costs as experienced by the company and others during years 1937, 1938, 1939, and 1940*—Continued

| Diameter (inches) | | Weight per foot (pounds) | | R. C. N. labor cost per foot (including all overheads on material and labor) | | Weighted average actual labor cost per foot (including all overheads on material and labor) | Difference | | Percent difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Screw-end pipe | Plain-end pipe | Screw-end pipe | Plain-end pipe |
| Outside | Nominal | Screw end | Plain end | Screw-end pipe | Plain-end pipe | | (5)−(7) | (6)−(7) | (8)÷(7)×100 | (9)÷(7)×100 |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| 10¾ | 10 | | 22.86 | | $1.285 | | | $0.759 | | 144.3 |
| 10¾ | 10 | | 28.03 | | 1.317 | | | .791 | | 150.4 |
| 10¾ | 10 | 32.75 | 31.20 | $1.619 | 1.324 | $0.526 | 1.093 | .798 | 207.8 | 151.7 |
| 10¾ | 10 | 35.75 | 34.24 | 1.638 | 1.341 | | 1.112 | .815 | 211.4 | 154.9 |
| 10¾ | 10 | 41.85 | 40.48 | 1.677 | 1.376 | | 1.151 | .850 | 218.8 | 161.6 |
| 12¾ | 12 | | 29.27 | | 1.341 | | | .506 | | 48.9 |
| 12¾ | 12 | | 41.51 | | 1.400 | | | .565 | | 54.6 |
| 12¾ | 12 | 45.45 | 43.77 | 2.015 | 1.617 | 1.035 | .980 | .582 | 94.7 | 56.2 |
| 12¾ | 12 | 51.15 | 49.56 | 2.052 | 1.650 | | 1.017 | .615 | 98.3 | 59.4 |
| 13 | 12 ½ "A" | 50.00 | | 2.044 | | | 1.009 | | 97.5 | |
| 16 | | | 42.05 | | 2.042 | | | .867 | | 73.8 |
| 16 | | | 52.35 | | 2.098 | 1.175 | | .923 | | 78.6 |
| 16 | | 65.30 | 62.57 | 2.854 | 2.162 | | 1.679 | .987 | 142.9 | 84.0 |

NOTES.—Data in italic figures denote deficit.

"A" denotes casing.

Data in columns (1) to (4) taken from exhibit 16-C, pp. 107 and 108, and exhibit 16-D, pp. 260 and 261.

Data in column (5) taken from column (3) of p. 15.

Data in column (6) taken from column (3) of p. 16.

Data in column (7) taken from column (13) of p. 14.

TABLE 2.—HOPE NATURAL GAS COMPANY, G-113

*Tabulation showing the weighted average labor cost per foot for installation of steel line pipe including all overheads on material and labor*

[Actual costs for laying new lines experienced by Hope Natural Gas Company for years 1937 to 1940 and by Manufacturers Light and Heat Company from March 1938 to December 1940]

| Pipe size | Hope Natural Gas Co., 1937 and 1938 [1] | | | Hope Natural Gas Co., 1939 and 1940 [2] | | | Manufacturers Light & Heat Co., March 1938 to December 1940 [2] | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Feet installed | Total labor cost (including all overheads on material and labor) | Weighted average labor cost per foot (3)÷(2) | Feet installed | Total labor cost (including all overheads on material and labor) | Weighted average labor cost per foot (6)÷(5) | Feet installed | Total labor cost (including all overheads on material and labor) | Weighted average labor cost per foot (9)÷(8) | Feet installed (2)+(5)+(8) | Total labor cost (including all overheads on material and labor) (3)+(6)+(9) | Weighted average labor cost per foot (12)÷(11) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 1" | 324 | $18.35 | $0.057 | 3,028 | $561.13 | $0.185 | | | | 3,352 | $579.48 | $0.173 |
| 1½" | 1,724 | 637.30 | .370 | 6,830 | 2,081.78 | .305 | | | | 8,551 | 2,719.08 | .318 |
| 2" | 93,098 | 10,264.52 | .110 | 77,197 | 13,550.79 | .176 | 18,168 | $2,560.68 | $0.141 | 188,460 | 26,376.04 | .140 |
| 3" | 59,503 | 11,342.39 | .191 | 28,176 | 9,091.91 | .323 | 230 | 96.71 | .420 | 87,909 | 20,531.01 | .234 |
| 4" & 4⅛" | 22,547 | 5,611.36 | .249 | 30,259 | 13,487.65 | .446 | 13,920 | 4,906.38 | .359 | 66,726 | 24,095.39 | .361 |
| 5", 5⅝₁₆" & 5⅝" | 42,309 | 12,837.82 | .303 | 37,643 | 15,463.20 | .409 | 1,610 | 702.92 | .437 | 81,562 | 28,943.94 | .355 |
| 6", 6⅛" & 6⅝" | 75,508 | 28,050.50 | .371 | 50,512 | 29,077.21 | .576 | 1,235 | 672.30 | .545 | 127,253 | 57,800.01 | .454 |
| 8" & 8⅛" | 4,065 | 3,512.27 | .864 | 2,431 | 1,883.82 | .775 | 75 | 91.21 | 1.216 | 6,571 | 5,487.30 | .835 |
| 10" | 39,013 | 20,329.68 | .521 | | | | 276 | 328.21 | 1.189 | 39,289 | 20,657.89 | .526 |
| 12" | | | | 51,997 | 53,808.70 | 1.035 | | | | 51,997 | 53,808.70 | 1.035 |
| 16" | 53,858 | 63,272.27 | 1.175 | | | | | | | 53,858 | 63,272.27 | 1.175 |
| Total | 391,946 | 155,876.51 | | 288,073 | 138,946.19 | | 35,512 | 9,448.41 | | 715,531 | 304,271.11 | |
| Miles | 74.2 | | | 54.6 | | | 6.7 | | | 135.5 | | |

[1] Obtained from adjusted book costs for Hope Natural Gas Company, for years 1937 and 1938 (as determined by F. P. C. accounting examiners).

[2] Obtained from closed construction work orders.

[Pages 15 to 16 omitted].

## 1 EXHIBIT NO. 74.—REPORT ON THE "ORIGINAL COST" TRENDED TO 1938 PRICES OF THE PLANT OF HOPE NATURAL GAS COMPANY EXISTING AT DECEMBER 31, 1938, F. P. C. WITNESS GOUGH

[Pages I to V omitted]

The subject of this report is the trending of the Original Cost of the plant of Hope Natural Gas Company existing at December 31, 1938, presented as evidence in this proceeding by Mr. Peter Antonelli of the firm of Ford, Bacon & Davis, Inc., on behalf of the company, in Exhibit No. 20. The trending, which is made to 1938 prices, involves thirty-two plant accounts of the company with an original cost per books of $52,730,665, that was revised to $69,735,637, and then trended to $105,101,912. The purpost in examining the trending was to learn exactly by what means it was effected and to ascertain whether the results obtained were in any sense an indication of the fair value of the company's property.

The problem of investigating the trending was attacked by means of a close study of several of the larger accounts. This approach proved preferable to an examination of all plant accounts for it made feasible an extensive study of the important few. Pursuant to this plan, basic data underlying Exhibit No. 20, chiefly as they relate to the three largest accounts, were analyzed. This procedure provided material with which
2 the results of the trending process could be tested and interpreted and, it provided that material from the very source from which the trended results themselves were obtained.

The results of the examination led to the positive conclusion that the methods and processes used in the trending are without merit and that the amount of $105,101,912 developed and set forth in Exhibit No. 20 as the product of that trending should in nowise serve as a criterion for the purpose of determining the fair value of the plant of Hope Natural Gas Company.

To aid in the presentation of the subject matter of this report, the analyses and interpretations of the plant accounts are preceded by a section entitled "Exhibit No. 20," which is a general exposition of the method of trending used in that Exhibit.

## Exhibit No. 20

Exhibit No. 20 presents a revision of the Original Cost of the plant of Hope Natural Gas Company as at December 31, 1938, and a trending of that revised cost to 1938 prices. By the revision, the Original Cost of plant per the company's books amounting to $52,730,665 was raised to $69,735,637 and by the trending that $69,735,637 was raised to $105,101,912. This report deals only with the trending, by means of which the revised Original Cost was increased $35,366,275; it does not take
3 up the matter of the revision of Original Cost. That question and the question of whether the dollars of Original Cost as revised have been properly assigned to the years when the property they represent was installed are separate and apart from the subject of this report.

Reference in this report to Original Cost unless otherwise clearly indicated by the context is to Original Cost as revised in Exhibit No. 20.

*The Method of Trending.*

The purpose of trending the Original Cost of the company's plant as revised was to determine how much it would cost to build the company's properties existing at December 31, 1938, on the assumption that that property would be built just as it actually was built, at present price levels (1938 prices) (T. 1537). This supposition, implying the slower, more laborious construction methods of the past priced on a time basis, at the higher wage-rates of 1938, and the lower material costs of yester-year priced at 1938 levels, was bound to produce a trended cost much greater in amount than the Original Cost, and it did. The Original Cost of all but one of the company's thirty-two plant accounts was trended higher, and the trending of the exception reduced its Original Cost only $3,583, or less than one percent. The over-all effect of the trending as indicated above produced an amount 50 percent greater than the amount of Total Original Cost as revised.

4 The method by which the trending was accomplished may be said to consist of three steps. They are the division of the Original Cost of each account into the documents thereof representative of the plant installed in each year; the development of a series of trend factors for each account, one for each year; and the translation of Original Cost into what is purported to be its 1938 equivalent, by means of the trend factors. The

first step, as indicated on page 3 above, is not treated in this report and the third step, since it is merely a mathematical calculation accomplished by dividing Original Cost by the trend factors, requires as such, no comment. The second step, the development of the trend factors, is the point of scrutiny and only upon the development of these factors and the implications in their use does this report focus attention. The effect of the application of the trend factors upon all of the company's accounts is most readily perceived from a review of Statement B of Exhibit No. 20 which contains a summary of the trending of all these accounts.

*The Trending by Accounts.*

Statement B (pp. 31–32, Exhibit No. 20) reveals that $35,098,442, or more than 99 percent of the total excess of Original Cost Trended over Original Cost amounting to $35,366,275, is to be found in eight of the thirty-two plant accounts trended and, moreover, that these eight accounts include more than 90 percent of the Original Cost that was trended. The amounts for these accounts, taken from Statement B, are enumerated in Table 1 which follows.

TABLE 1.—*Original cost trended, original cost and excess of original cost trended over original cost of the eight largest plant accounts and of all plant accounts as at Dec. 31, 1938.*

| Name of account | Original cost trended (Exhibit No. 20) | Original cost (Exhibit No. 20) | Excess of original cost trended over original cost |
|---|---|---|---|
| Producing gas wells: | | | |
| Construction | $34,384,320 | $17,783,637 | $16,600,683 |
| Equipment | 10,663,983 | 8,168,191 | 2,495,792 |
| Field lines: | | | |
| Construction | 7,038,970 | 4,076,871 | 2,962,099 |
| Equipment | 10,505,272 | 8,279,885 | 2,225,387 |
| Mains: | | | |
| Construction | 9,684,569 | 5,266,108 | 4,418,461 |
| Equipment | 13,360,169 | 10,225,450 | 3,134,719 |
| Compressor station structures | 2,498,445 | 1,811,605 | 686,840 |
| Compressor station equipment | 11,536,967 | 8,644,011 | 2,892,956 |
| | 99,672,298 | 64,255,760 | 35,416,538 |
| Less: Property in the 8 accounts listed above that is used to transport coke-oven gas | 1,100,075 | 781,979 | 318,096 |
| Portion of total plant (exclusive of property used to transport coke-oven gas) included in the 8 accounts listed above | 98,572,223 | 63,473,781 | 35,098,442 |
| Total plant (exclusive of property used to transport coke-oven gas) | 105,101,912 | 69,735,637 | 35,366,275 |

Source: Statement B, Exhibit No. 20.

6 Of the eight accounts listed in Table 1, three, namely, the Gas Well, Field Lines, and Mains Construction accounts consist almost entirely of labor costs; three, namely, the Gas Wells, Field Lines, and Mains Equipment accounts consist almost entirely of material costs; and two, Compressor Station Structures and Compressor Station Equipment consist of both labor and material costs. The amounts in the tabulation clearly indicate that the three Construction accounts were trended relatively much higher than the three Equipment accounts for the same classes of property. The increase in the Construction accounts by trending was 89 percent, while the increase in the Equipment accounts was only 29 percent. The excess of Original Cost Trended over Original Cost for the three Construction accounts amounting to $23,981,263 comprises about two-thirds of the excess of all thirty-two accounts, amounting to $35,366,275.

Three of the eight plant accounts listed in Table 1 were chosen for detailed study: Producing Gas Wells—Well Construction, Mains—Construction, and Mains—Equipment. They were selected because they constitute the largest Construction and Equipment accounts and represent in themselves a large part of total plant. Combined they contain nearly one-half of all Original Cost that was trended and embrace $24,153,863 of the total Excess of Original Cost Trended over Original Cost. A section of this report is devoted to each of them.

7 PRODUCING GAS WELLS—WELL CONSTRUCTION

The Producing Gas Wells—Well Construction Account is of outstanding importance in this examination because it is the largest of the company's plant accounts and was trended to an amount greatly in excess of the Original Cost of the property it represented. From an Original Cost of $17,783,637, it was trended to $34,384,320, an amount $16,600,683 or 93 percent in excess of that Original Cost. The trending was done by the application of factors based entirely on wage-rates. Charges to the account consist of the labor cost of drilling wells and other costs incident to that operation, such as teaming, rig-costs, and torpedoes.

Two studies of this account were made: an analysis of well drilling costs and an analysis of Original Cost as shown in Exhibit No. 20. The analysis of well drilling costs covers the years 1904–15, and 1938, and the analysis of Original Cost, the years

1896-1900, 1911-15, 1937, and 1938. In both studies the ratio that the costs of earlier years bear to the costs of 1938 were developed and compared with the trend factors used in Exhibit No. 20.

Since well drilling costs constitute the major part of all costs charged to the Well Construction Account, the studies to the extent that they cover the same years may be said to be a duplication, and in a sense they are. Both were undertaken so that
8 comparisons from two sets of data might be made. Results for the years 1911-15, which are the years covered by both studies, are similar, as might be expected. The well drilling costs per foot for that period were 59.6 percent of those costs for the year 1938 and the corresponding ratio developed from the analysis of Original Cost was 60.0 percent. The proximity of these percentages indicates a close correlation between the cost per foot for drilling and the cost per foot for all charges applicable to the account.

The Original Cost of Well Construction like the Original Cost of all other plant accounts trended in Exhibit No. 20 was divided into the amounts thereof installed in each of the years during the period in which the plant that it represents was built. For Well Construction this period extends back forty-eight years, from 1938 to 1891, and part of the Original Cost of that account was installed in every one of those years. To each of these forty-eight subdivisions of the Original Cost of Well Construction a trend factor was applied to convert it into what purported to be its 1938 equivalent. This application and the resultant Original Cost Trended are shown on pages 66 and 67 of Exhibit No. 20. The conversion was accomplished simply by dividing each yearly amount of Original Cost by its trend factor.

*The Development of the Trend Factors.*

The factors used to trend Well Construction in Exhibit No. 20 for the years prior to 1906 were derived from the hourly
9 wage-rates for Common Laborers, the only wage-rates available for those years, and for the years 1906 to 1938 from the hourly wage-rates for Drillers and Tool Dressers weighted equally, one and one. The wage-rates are those paid by the company (See pp. 55-6, Exhibit No. 20). For example, the trend factor of 38.2 which was used to trend Original Cost installed in 1911 is a composite of one-half the sum of 39.96 and 36.49, the trend ratios for Driller and Tool Dresser, respectively, for 1911. These ratios are the percent which the 1911

hourly wage-rates of Driller and Tool Dresser bear to their 1938 wage-rates.

Since the trend factors of Exhibit No. 20 are really the ratios that the hourly wage-rates of early years bear to the hourly wage-rates of 1938, the division of the amount of Original Cost by them, which is carried out in that Exhibit, translates the Original Cost into the amount the property would have cost to construct had it been installed in the number of hours in which it actually was installed, paid for at the hourly wage rates prevalent in 1938. Virtually the resultant Original Cost Trended is the product of the hourly wage-rate of 1938 multiplied by the man-hours expended in earlier years; it represents the hourly wage-rates of the 40-hour week (or 176-hour month) of 1938 multiplied by the man-hours of the 72-hour week (or 312-hour month) of the past. (See Column 2, Appendix B, which is a copy of working papers that support Exhibit No. 20.) It is the capitalization of the weekly or monthly time of Drillers and Tool Dressers, who until 1924 worked 72 hours a week, in amounts that are as much as 77 percent higher than the amounts they received per week or per month in 1938. It is a capitalization of man-hours without regard to what was accomplished in those hours.

*Well Drilling Costs.*

The greater part of Original Cost of Producing Gas Wells—Well Construction, existing at December 31, 1938, probably about 70 percent of it, consisted of well drilling costs, and for this reason and the fact that the remainder of the costs were incident to the drilling costs, the entire account was trended in Exhibit No. 20 with factors derived from hourly wage-rates for drillers and tool dressers whose wages comprise well drilling costs. Accordingly, the average price per foot to drill affords a safe and convenient gauge with which to measure the trueness of the factors used to trend the account in Exhibit No. 20.

*Depth of Wells and Cost to Drill.*

Most of the company's well drilling was done under contract let by bid either to independent drillers or to the company's own well drilling department, on a "price per foot" basis, and a list of the costs incurred under certain of these contracts for certain years was available. This list which is reproduced in this report as Appendix C gives the depth in feet to which wells were drilled and the price paid per foot to drill them. These figures were

studied, first, to determine the variation each year in the
11 depth of drilling and in the price per foot to drill and then, to ascertain the effect, if any, that variation in the depth of drilling had upon price per foot to drill. It was important to confirm the fact that drilling conditions in each of the ... years were reasonably uniform, for that uniformity was a prerequisite to the next step in the study, the development of drilling cost ratios.

Table 2, and the data underlying it, which are reproduced in this report in Appendix C, show clearly that wells were drilled to fairly uniform depths during the years compared, and that drillings were within such a narrow depth range that the price per foot to drill was not appreciably affected. For example, the deepest well drilled in 1938, to a depth of 4,503 feet cost $1.75 per foot to drill, although one of the shallowest wells drilled in that year, to a depth of only 1,642 feet, cost $2.50 per foot to drill. The cost of the wells listed in Appendix C indicates that depth was not an important determinant of the price per foot to drill.

12 TABLE 2.—*Well construction—Drilling statistics for the years 1904–05, 1906–10, 1911–15, and 1938*

| | 1904–05 | 1906–10 | 1911–15 | 1938 |
|---|---|---|---|---|
| Basis for comparative statistics shown below: | | | | |
| Number of wells drilled | 10 | 25 | 73 | 26 |
| Number of feet drilled | 26,734 | 60,442 | 177,576 | 65,668 |
| Cost of drilling, per foot: | | | | |
| Highest price | $1.35 | $1.40 | $1.30 | $2.50 |
| Lowest price | $1.10 | $1.10 | $1.00 | $1.45 |
| Weighted average price | $1.23 | $1.20 | $1.15 | $1.93 |
| Depth drilled, in feet: | | | | |
| Deepest drilling | 3,054 | 3,094 | 3,214 | 4,503 |
| Shallowest drilling | 1,848 | 1,267 | [1] 940 | 1,575 |
| Average drilling | 2,673 | 2,418 | 2,432 | 2,526 |

[1] The next shallowest drilling was 1,304 feet.

13 The ratios which the prices per foot to drill in the 1904–05, 1906–10, and 1911–15 periods bear to the price per foot to drill in 1938 are compared in Table 3 with the highest and lowest trend factors used in Exhibit No. 20 for years in those periods. This comparison shows unmistakably that the trend factors used in Exhibit No. 20 are much lower than they would be if they were predicated upon the cost to produce units of property rather than upon hourly wage rates only. The price-per-foot ratios were developed from the weighted average prices shown on Table 2.

14 TABLE 3.—*Producing gas wells—Well construction—A comparison of the trend factors used in Exhibit No. 20 for the years 1904–05, 1906–10, 1911–15, and 1938 with ratios based on well drilling costs for those years*

| Years | Trend factors used in Exhibit No. 20 (1938=100.0) | | Ratio of average price per foot for well drilling (1938=100.0) |
|---|---|---|---|
| | Highest | Lowest | |
| 1904–05 | 33.1 | 31.1 | 63.7 |
| 1906–10 | 37.6 | 35.6 | 62.2 |
| 1911–15 | 40.2 | 38.2 | 59.6 |
| 1938 | 100.0 | 100.0 | 100.0 |

15 *Analysis of Original Cost.*

Although the well drilling cost tests, by inference, lead to the conclusion that man-hours for years prior to 1938, which were priced at 1938 hourly wage-rates in Exhibit No. 20, were less productive than 1938 man-hours, ultimate proof of the correctness of that conclusion really is to be found in an analysis of the Original Cost of Well Construction itself. Such an analysis was undertaken to establish that fact incontrovertibly.

A complete analysis of the Original Cost of the Well Construction Account was neither necessary nor feasible. It would have been a most lengthy task. Instead, two periods of five years each were chosen for analysis, the years 1896 to 1900, and 1911 to 1915, inclusive. Originally, the later period was selected because the amount of Original Cost installed in that period and existing at December 31, 1938; was sufficiently large to be representative of the account and also because the period was one of normal construction conditions. Moreover, its remoteness to 1938 gave full play to the very circumstances of the trending process sought to be exposed. Later, the 1896–1900 period was analyzed to widen the range of the period tested and to afford proof that the results of the analysis of the period first tested were not exceptional.

The aim in making this analysis was to determine the man-hour productivity of labor during the periods analyzed and it was accomplished in four steps. The cost of Well Construction
16 exclusive of Overheads was segregated from the total Original Cost of that construction; the number of feet of construction which that cost represented was tabulated; the cost of Construction exclusive of Overheads was divided by the amount of the average hourly wage-rates used in the trading process (Exhibit No. 20), thus developing the number of man-hours ex-

pended on the construction; and, finally, the number of feet of construction was divided by the man-hours expended to determine the number of feet of Well constructed per man-hour.

In order to present a comparison of the man-hour productivity and costs of the earlier years with those of 1938, the year to which Original Cost was trended in Exhibit No. 20, an analysis of 1938 costs similar to the analysis made for the earlier period also had to be and was undertaken. It was supplemented by an analysis of costs for 1937, which had been given the same value for trending purposes in Exhibit No. 20 as those of 1938, viz., 100.0, for the reason that the 1938 Construction alone did not provide a great amount of construction experience.

The amounts of Original Cost for the years that were analyzed and the amounts to which they were trended are reproduced from Exhibit No. 20 in Table 4.

17 TABLE 4.—*Producing gas wells—Well construction—Original cost and original cost trended per Exhibit No. 20, pages 66 and 67, 1896–1900, 1911–15, 1937, and 1938*

| Year first placed in public service | Original cost | Trended to 1938 prices (1938=100.0) | Original cost trended to 1938 prices |
|---|---|---|---|
| (A) | (B) | (C) | (D) (B divided by C) |
| 1896 | $16,621.49 | 27.8 | $59,789.53 |
| 1897 | 24,765.33 | 27.8 | 89,083.92 |
| 1898 | 9,619.62 | 27.8 | 34,602.95 |
| 1899 | 76,100.49 | 27.8 | 273,742.77 |
| 1900 | 106,957.23 | 31.1 | 343,913.87 |
| | 234,064.16 | | 801,133.04 |
| 1911 | 667,745.80 | 38.2 | 1,747,947.11 |
| 1912 | 609,543.22 | 38.2 | 1,595,662.86 |
| 1913 | 818,211.69 | 40.2 | 2,035,352.44 |
| 1914 | 800,037.39 | 40.2 | 1,990,142.99 |
| 1915 | 579,832.99 | 40.2 | 1,442,370.60 |
| | 3,475,341.06 | | 8,811,475.67 |
| 1937 | 163,530.10 | 100.0 | 163,530.10 |
| 1938 | 253,069.59 | 100.0 | 153,069.59 |

18 The analysis of Original Cost for the years enumerated in Table 4 was made from the company's "Well Construction Record" which gives the depth and cost of construction of each well. A summary of the results of the analysis by years showing Well Construction Costs divided into five classifi-

cations is presented in Table 5. The analysis discloses that mo
than nine-tenths of total Original Cost is in the two classificatio
that cover drilling operations, namely, Original Drilling an
Drilling Deeper, and it was made particularly to ascertain th
amount of direct costs applicable to each of these two oper
tions.

19 TABLE 5.—*Producing gas wells—Well construction—Analysis of ori
inal cost per Exhibit No. 20, 1896–1900, 1911–15, 1937, and 1938*

| Year | Original drilling exclusive of overheads [1] | Drilling deeper exclusive of overheads [1] | Adjustments for change in equipment | Overheads | Purchased from nonutility | Total origin cost (exhib No. 20) |
|---|---|---|---|---|---|---|
| 1896 | $16,621.49 | | | | | $16,621. |
| 1897 | 23,396.79 | $1,368.54 | | | | 24,765. |
| 1898 | 9,057.08 | 562.54 | | | | 9,619. |
| 1899 | 42,469.28 | | $833.91 | $33.79 | $34,431.33 | 76,100. |
| 1900 | 95,693.61 | | 755.96 | 392.09 | 11,627.48 | 106,957. |
| 1911 | 594,521.77 | 32,609.08 | 4,278.86 | 34,717.18 | 10,146.03 | 667,715. |
| 1912 | 573,598.10 | 12,355.11 | 5,629.86 | 29,193.11 | 26.76 | 609,543. |
| 1913 | 755,865.14 | 22,263.65 | 6,844.48 | 38,955.19 | 7,972.19 | 818,211. |
| 1914 | 729,261.77 | 29,872.25 | 5,068.78 | 38,195.30 | 7,776.22 | 800,037. |
| 1915 | 479,850.19 | 54,289.09 | 1,328.65 | 32,329.82 | 14,692.54 | 579,832. |
| 1937 | 115,040.72 | 25,124.37 | 4,506.45 | 18,002.74 | 845.82 | 163,520. |
| 1938 | 114,721.81 | 12,973.30 | 5,029.56 | 15,680.75 | 4,664.17 | 153,069. |

[1] The amounts shown in this column for the years 1896 to 1900 include the cost of a number of we
drilled for other companies, for which the overheads could not be determined and segregated.

20 *Man-Hour Productivity.*

With direct labor costs and number of feet drilled avail
able from the analysis of Original Cost, both for Original Drillin
and Drilling Deeper, it was possible by the use of the wage rate
used in developing the trend factors of Exhibit No. 20 to obtai
the number of man-hours expended in each year and consequentl
the number of feet of Well constructed per man-hour. The man
hours expended, relating as they do to all the direct costs of Wel
Construction, embrace not only the drilling operation but th
installation of casing and tubing as well. These computation
are shown in Tables 6 and 7 which also show the average per
formance for each year translated into the ratio it bears to 193
performance.

21 TABLE 6.—*Producing gas wells—Well construction—Determination of number of feet of original drilling drilled per man-hour in the years 1896–1900, 1911–15, 1937, and 1938*

| Year | Cost of original drilling exclusive of overheads (table 6) | Average hourly wage rates (Appendix D) | Man-hours expended | Feet of original drilling | Feet of original drilling drilled per man-hour | Ratios of man-hour productivity (1938=100.0) |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) (B÷C) | (E) | (F) (E÷D) | (G) |
| 1896 | $16,621.49 | $0.287 | 57,914 | 8,938 | 0.1543 | 38.8 |
| 1897 | 23,396.79 | .287 | 81,521 | 13,104 | .1607 | 40.5 |
| 1898 | 9,057.08 | .287 | 31,557 | 4,974 | .1576 | 39.7 |
| 1899 | 42,469.28 | .287 | 147,976 | 24,166 | .1633 | 41.1 |
| 1900 | 95,693.61 | .322 | 297,185 | 59,083 | .1988 | 50.1 |
| 1911 | 504,521.77 | .396 | 1,501,318 | 353,725 | .2356 | 59.3 |
| 1912 | 575,398.10 | .396 | 1,448,480 | 343,376 | .2371 | 59.7 |
| 1913 | 755,865.14 | .416 | 1,816,983 | 437,257 | .2406 | 60.6 |
| 1914 | 729,261.77 | .416 | 1,753,033 | 450,457 | .2569 | 64.7 |
| 1915 | 479,850.19 | .416 | 1,153,486 | 313,577 | .2719 | 68.5 |
| 1937 | 115,940.72 | 1.064 | 108,120 | 47,701 | .4411 | 111.1 |
| 1938 | 114,721.81 | 1.074 | 106,817 | 42,438 | .3972 | 100.0 |

22 TABLE 7.—*Producing gas wells—Well construction—Determination of number of feet of "drilling deeper" drilled per man-hour in the years 1896–1900, 1911–15, 1937, and 1938*

| Year | Cost of drilling deeper exclusive of overheads (table 6) | Average hourly wage rates (Appendix D) | Man-hours expended | Feet of drilling deeper | Feet of drilling deeper drilled per man-hour | Ratios of man-hour productivity (1938=100.0) |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) (B÷C) | (E) | (F) (E÷D) | (G) |
| 1896 | | $0.287 | | | | |
| 1897 | $1,368.54 | .287 | 4,768 | 860 | 0.1804 | 69.1 |
| 1898 | 562.54 | .287 | 1,960 | 311 | .1587 | 60.8 |
| 1899 | | .287 | | | | |
| 1900 | | .322 | | | | |
| 1911 | 32,609.08 | .396 | 82,346 | 11,720 | .1423 | 54.5 |
| 1912 | 12,355.11 | .396 | 31,199 | 6,382 | .2045 | 78.4 |
| 1913 | 22,263.65 | .416 | 53,518 | 10,859 | .2029 | 77.7 |
| 1914 | 29,872.25 | .416 | 71,808 | 11,267 | .1569 | 60.1 |
| 1915 | 54,289.09 | .416 | 130,502 | 18,115 | .1388 | 53.2 |
| 1937 | 25,124.37 | 1.064 | 23,613 | 5,014 | .2123 | 81.3 |
| 1938 | 12,973.30 | 1.074 | 12,079 | 3,153 | .2610 | 100.0 |

23 These two tables definitely show that the man-hours of years prior to 1938 were less productive than the man-hours of 1938. It is particularly notable that a steady improvement in man-hour productivity is discernible for Original Drilling during the years of the two five-year periods for which the volume of work done provides truly representative ratios.

A series of ratios that reflect not only increases in the ho
wage-rates but increases in the hourly productivity as wel
shown in Tables 6 and 7, has been computed and is presente
Table 8. These ratios are predicated upon the cost per foo
construct, a unit which automatically gives weight both to w
rate and productivity factors. The cost per foot was determ
by dividing the Original Cost of Well Construction at Dece
31, 1938, installed in each of the years shown, by the numbe
feet that that Original Cost represents, as determined from
Well Construction Record used in the analysis of Original C
The comparison of these ratios with the trend factors used in
hibit No. 20 (CF. page 17) is illuminating.

24 TABLE 8.—*Producing gas wells—Well construction—Determination of original drilling, drilling deeper, and combined costs per foot, exclusive of overheads, for the years 1896–1900, 1911–15, 1937, and 1938*

| Year | Original drilling | | | | Drilling deeper | | | | Combined | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cost (table 6) | Feet | Cost per foot | Ratio of cost per foot (1938=100.0) | Cost (table 6) | Feet | Cost per foot | Ratio of cost per foot (1938=100.0) | Cost | Feet | Cost per foot | Ratio of cost per foot (1938=100.0) |
| (A) | (B) | (C) | (D) (B÷C) | (E) | (F) | (G) | (H) (F÷G) | (I) | (J) (B+F) | (K) (C+G) | (L) (J÷K) | (M) |
| 1896 | $16,621.49 | 8,938 | $1.86 | 68.9 | | | | | $16,621.49 | 8,938 | $1.86 | 66.4 |
| 1897 | 23,396.79 | 13,104 | 1.78 | 65.9 | $1,368.54 | 860 | $1.59 | 38.7 | 24,765.33 | 13,964 | 1.77 | 63.2 |
| 1898 | 9,057.08 | 4,974 | 1.82 | 67.4 | 562.54 | 311 | 1.81 | 44.0 | 9,619.62 | 5,285 | 1.82 | 65.0 |
| 1899 | 42,469.28 | 24,166 | 1.76 | 65.1 | | | | | 42,469.28 | 24,166 | 1.76 | 62.9 |
| 1900 | 95,693.61 | 59,083 | 1.62 | 60.0 | | | | | 95,693.61 | 59,083 | 1.62 | 57.9 |
| 1896–1900 | 187,238.25 | 110,265 | 1.70 | 63.0 | 1,931.08 | 1,171 | 1.65 | 40.1 | 189,169.33 | 111,436 | 1.70 | 60.7 |
| 1911 | 594,521.77 | 353,725 | 1.68 | 62.2 | 32,609.08 | 11,720 | 2.78 | 67.6 | 627,130.85 | 365,445 | 1.72 | 61.4 |
| 1912 | 573,598.10 | 343,376 | 1.67 | 61.9 | 12,355.11 | 6,382 | 1.94 | 47.2 | 585,953.21 | 349,758 | 1.68 | 60.0 |
| 1913 | 755,865.14 | 437,257 | 1.73 | 64.1 | 22,263.65 | 10,859 | 2.05 | 49.9 | 778,128.79 | 448,116 | 1.74 | 62.1 |
| 1914 | 729,261.77 | 450,457 | 1.62 | 60.0 | 29,872.25 | 11,267 | 2.65 | 64.5 | 759,134.02 | 461,724 | 1.64 | 58.6 |
| 1915 | 479,850.19 | 313,577 | 1.53 | 56.6 | 54,289.09 | 18,115 | 3.00 | 73.0 | 534,139.28 | 331,692 | 1.61 | 57.5 |
| 1911–15 | 3,133,096.97 | 1,898,392 | 1.65 | 61.1 | 151,389.18 | 58,343 | 2.59 | 63.0 | 3,284,486.15 | 1,956,735 | 1.68 | 60.0 |
| 1937 | 115,040.72 | 47,701 | 2.41 | 89.2 | 25,124.37 | 5,014 | 5.01 | 121.9 | 140,165.09 | 52,715 | 2.66 | 95.0 |
| 1938 | 114,721.81 | 42,438 | 2.70 | 100.0 | 12,973.30 | 3,153 | 4.11 | 100.0 | 127,695.11 | 45,591 | 2.80 | 100.0 |

Next to Producing Gas Wells—Well Construction, Mains-Construction is the largest of the property accounts consisting chiefly of labor costs. Primarily, it contains the cost of labor for laying mains and certain other costs incident to that operation, such as teaming and freight. From an Original Cost of $5,266,108 it was trended to $9,684,569, an amount $4,418,461 or 84 percent in excess of that Original Cost.

In preparing analyses and in making comparisons of Mains-Construction two things were kept in mind: that lines consisted of pipe of several dimensions and that they had been laid under varying conditions, such as soil and terrain conditions, not to mention others. These obstacles were overcome by making comparisons by pipe size, and for those sizes only for which there was sufficient footage to assure typical average costs.

Two studies were made: one embracing 1,400,315 feet of main installed, based upon an analysis of the Original Cost shown in Exhibit No. 20 for the years 1911–15 and 1936–38, and the other embracing 3,294,595 feet, based upon typical construction in three sizes of main for the years 1898–1938. To the extent that both studies cover main in plant existing at December 31, 1938, they overlap. The first study is an analysis and comparison of amounts of Original Cost that were trended in Exhibit No. 20; the
26 second is an analysis and comparison of all typical installations in three sizes of main over a long period of years, including both main that was and was not in plant as of December 31, 1938.

*The Development of the Trend Factors.*

Similar to Well Construction, in that it is made up of labor costs, Mains-Construction was trended in the same way as that account, by the use of trend factors developed from hourly wage-rates. The method employed has been analyzed and compared in this report in the same manner that the method employed for Well Construction has been analyzed and compared, and for the same general purpose.

The factors used in Exhibit No. 20 to trend Mains-Construction were derived for the years prior to 1906 from hourly wage-rates for common labor, the only wage-rates available for those years, and for the years 1906 to 1938 from hourly wage-rates for roustabouts and laborers. The factors for 1906 and subsequent

years were obtained by weighting the hourly wage-rates, as found on the company's books, of one roustabout and four laborers. (See pp. 55–6, Exhibit No. 20.) For example, the factor of 40.4 which was used to trend Original Cost installed in 1911 is a composite of one-fifth of 39.01 and four-fifths of 40.80, the trend factors for roustabout and laborer, respectively, for 1911. (See Appendix E and F.) These factors are the ratio that the 1911 hourly wage-rates of roustabout and laborer bear to the 1938 wage-rates for those types of labor. Having been trended
27 in the same manner that Well Construction was trended, the Original Cost of Mains-Construction trended represents, as the Original Cost of Well Construction trended does, the capitalization of man-hours of bygone years at 1938 labor rates.

*Analysis of Original Cost.*

The analysis of Original Cost of Mains-Construction for the years 1911–15 and 1936–38 was undertaken for the purpose of making a comparison of the man-hour productivity and the cost per foot to lay mains in two periods. The amounts of that Original Cost analyzed and the amounts to which they were trended in Exhibit No. 20 are shown in Table 9. Their classification into Direct Costs and Overheads are shown in Table 10.

28 TABLE 9.—*Mains—Construction—Original cost and original cost trended per Exhibit No. 20 (p. 82), for the years 1911–15, 1936, 1937, and 1938.*

| Year first placed in public service | Original cost | Trend to 1938 prices (1938 = 100.0) | Original cost trended to 1938 prices |
|---|---|---|---|
| (A) | (B) | (C) | (D) (B÷C) |
| 1911 | $235,578.12 | 40.4 | $583,114.15 |
| 1912 | 8,866.88 | 40.6 | 21,839.61 |
| 1913 | 342,213.67 | 41.7 | 820,656.26 |
| 1914 | 4,534.52 | 41.3 | 10,979.47 |
| 1915 | 13,499.97 | 41.8 | 32,296.57 |
| | 604,693.16 | | 1,468,886.06 |
| 1936 | 671,024.71 | 88.1 | 761,662.55 |
| 1937 | 113,713.37 | 100.0 | 113,713.37 |
| 1938 | 3,563.97 | 100.0 | 3,563.97 |
| | 788,302.05 | | |

29 TABLE 10.—*Mains—Construction—Original cost per Exhibit No. 20 subdivided into direct costs and overheads for the years 1911–15, 1936, 1937, and 1938*

| Year | Direct costs | Overheads | Total |
|---|---|---|---|
| 1911–15 | [1] $580,155.05 | $25,581.31 | $604,693.16 |
| 1936 | 612,268.75 | 58,755.96 | 671,024.71 |
| 1937 | 104,295.89 | 9,417.48 | 113,713.37 |
| 1938 | 3,313.45 | 250.52 | 3,563.97 |
| 1936–38 | 719,878.09 | 68,423.96 | 788,302.05 |

[1] Includes $1,043.20 for lines installed prior to 1911 and $87,798.07 for property purchased from a predecessor.

30 *Man-Hour Productivity.*

Table 11 shows the direct costs of the 1911–15 and 1936–38 periods for 10-, 12-, 16-, and 20-inch main with the footage of installation for each size. The direct costs of these sizes comprise about 97 percent of the total direct costs for each period. This table also shows the number of feet of main, by sizes, installed per man-hour during each of the two periods, and the ratio of the man-hour productivity in the 1911–15 period to man-hour productivity in the 1936–38 period. The number of feet installed per man-hour was obtained by dividing the number of feet installed by the number of man-hours expended on their installation, and the number of man-hours expended, by dividing direct costs by the average hourly wage rates for Mains-Construction as determined from the working papers of Exhibit No. 20. The man-hour productivity of three years, 1936–38, rather than the productivity of 1938 alone was compared with the 1911–15 man-hour productivity for the reason that the amount of Original Cost installed in 1938, being only $3,563, does not afford adequate performance experience.

The comparisons for all four dimensions of pipe indicate greater man-hour productivity in the later period.

TABLE 11.—*Mains—Construction—Determination of feet of main installed per man-hour in the years 1911–15 and 1936–38*

| Period | Dimension of main in inches | Year installed | Original cost exclusive of overheads—direct costs (table 12) | Average hourly wage rates (Appendix G) | Man-hours expended | Feet of main installed | Feet of main installed per man-hour | Rate of man-hour productivity (1936–38 = 100.0) |
|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) (D÷E) | (G) | (H) (G÷F) | (I) |
| 1911–15 | 10 | 1911 | $8,106.12 | $0.219 | 37,014 | 17,488 | | |
| | | 1912 | | .220 | | | | |
| | | 1913 | 49,517.89 | .225 | 220,080 | 121,850 | | |
| | | 1914 | | .224 | | | | |
| | | 1915 | 12,987.04 | .256 | 50,731 | 31,151 | | |
| | | Total | 70,611.05 | .229 | 307,825 | 170,889 | .5551 | 54.3 |
| | 12 | 1911 | 108,108.57 | .219 | 493,646 | 203,678 | | |
| | | 1912 | | .220 | | | | |
| | | 1913 | 10,436.60 | .225 | 46,385 | 13,789 | | |
| | | 1914 | 4.29 | .224 | 19 | 10 | | |
| | | 1915 | | .256 | | | | |
| | | Total | 118,549.46 | .220 | 540,050 | 217,477 | .4027 | 90.1 |
| | 16 | 1911 | | .219 | | | | |
| | | 1912 | 5,222.12 | .220 | 23,737 | 5,870 | | |
| | | 1913 | 120,403.26 | .225 | 535,126 | 110,388 | | |
| | | 1914 | 1,115.46 | .224 | 4,980 | 1,740 | | |
| | | 1915 | | .256 | | | | |
| | | Total | 126,740.84 | .225 | 563,843 | 117,998 | .2093 | 44.2 |

31 TABLE 11.—*Mains—Construction—Determination of feet of main installed per man-hour in the years 1911–15 and 1936–38*—Con.

| Period | Dimension of main in inches | Year installed | Original cost exclusive of overheads—direct costs (table 12) | Average hourly wage rates (Appendix G) | Man-hours expended | Feet of main installed | Feet of main installed per man-hour | Ratio of man-hour productivity (1936–38=100.0) |
|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) (D÷E) | (G) | (H) (G÷F) | (I) |
| | 20 | 1911 | $108,081.13 | $0.219 | 493,521 | 125,905 | | |
| | | 1912 | 258.12 | .220 | 1,173 | 228 | | |
| | | 1913 | 143,439.64 | .225 | 637,510 | 100,338 | | |
| | | 1914 | 1,559.70 | .224 | 6,963 | 1,914 | | |
| | | 1915 | | .256 | | | | |
| | | Total | 253,338.59 | .222 | 1,139,167 | 228,385 | 0.2005 | 67.0 |
| | Other dimensions and miscellaneous | | 10,915.11 | | | | | |
| | | | 680,155.05 | | | | | |
| 32 1936–38 | 10 | 1936 | 261.64 | .483 | 542 | 347 | | |
| | | 1937 | 22,661.80 | .558 | 40,613 | 42,138 | | |
| | | 1928 | 882.94 | .564 | 1,565 | 1,171 | | |
| | | Total | 23,806.38 | .557 | 42,720 | 43,656 | 1.0219 | 100.0 |
| | 12 | 1936 | 611,480.34 | .483 | 1,266,005 | 560,292 | | |
| | | 1937 | 238.49 | .558 | 427 | 5,629 | | |
| | | 1938 | 20.33 | .564 | 36 | 21 | | |
| | | Total | 611,739.16 | .483 | 1,266,468 | 565,942 | .4469 | 100.0 |
| | 16 | 1936 | 229.47 | .483 | 475 | 162 | | |
| | | 1937 | 63,273.24 | .558 | 113,393 | 53,836 | | |
| | | 1938 | 709.25 | .564 | 1,256 | 500 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total | 64,210.96 | .557 | 115,124 | 64,498 | .4734 | 100.0 |
| 20 | 1936 | 620.08 | .483 | 1,284 | 342 | | |
| | 1937 | 1,964.24 | .558 | 3,520 | 1,065 | | |
| | 1938 | 59.83 | .564 | 106 | 33 | | |
| | Total | 2,644.15 | .539 | 4,910 | 1,470 | .2694 | 100.0 |
| Other dimensions and miscellaneous | | 17,477.44 | | | | | |
| | | 719,878.09 | | | | | |

33 Having developed the number of feet of main installed per hour, it was next sought to determine the cost per foot to install main of each size. This is done in Table 12 by dividing the average hourly wage rates by the number of feet installed per hour.

The hourly wage rates used for the 1911–15 period in Table 12 are the weighted averages derived from the five annual rates used to develop the trend factors of Exhibit No. 20. The hourly wage rate used for 1938 in that table, i. e., $0.564, is the 1938 wage rate used to develop the trend factors of Exhibit No. 20, corrected to include social security taxes for that year. (See Appendix G.) The 1938 costs are based upon the man-hour productivity of 1936, 1937, and 1938, at 1938 wage rates, the performance of three years being used because Mains-Construction in 1938 was only $3,563, which was inadequate for the purpose of developing typical costs. The cost per foot to install main in the 1911–15 period is best compared with the 1938 cost by means of the ratios in Column F. These ratios, unlike the trend factors used in Exhibit No. 20 which are based on hourly wage rates only, reflect not only hourly wage rates but man-hour productivity as well.

34 TABLE 12.—*Mains—Construction—Determination of cost to install 10-, 12-, 16-, and 20-inch main per foot, exclusive of overheads, for the years 1911–15 and 1938*

| Period | Main dimension in inches | Average hourly wage rates (table 33) | Feet installed per hour (table 13) | Cost to install per foot | Ratio of cost per foot (1938=100.0) |
|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) (C÷D) | (F) |
| 1911–15 | 10 | $0.225 | 0.3521 | $0.6390 | 74.8 |
| | 12 | .220 | .3027 | .5446 | 63.8 |
| | 16 | .227 | .2093 | 1.0845 | 90.2 |
| | 20 | .222 | .2005 | 1.1067 | 93.4 |
| 1938 | 10 | .564 | 1.0219 | .5520 | 100.0 |
| | 12 | .564 | 1.4469 | 1.3020 | 100.0 |
| | 16 | .564 | 1.4734 | 1.1980 | 100.0 |
| | 20 | .564 | 1.2994 | 1.3844 | 100.0 |

[1] Performance of 1936, 1937, and 1938 used for purpose of comparison.

35 *Analysis of $3,244,145 of Typical Construction.*

The second study of Mains-Construction is based upon an analysis of large, typical installations of 10-, 12-, and 20-inch main. These sizes were chosen for analysis because they represent a predominant amount of the footage and cost in the Mains-

Construction Account. The jobs analyzed represent $3,244,145 of costs and 3,294,595 feet of main. The analysis was made from data contained in the company's Mains Lines Inventory Ledger. It includes all large typical installations undertaken during the period of the company's existence from 1898 to 1938, inclusive.

The study was made simply to determine whether the number of feet of main laid per man-hour was greater or less in recent years than it had formerly been. To reach a sound conclusion in this matter an analysis of a great many feet of installation had to be made, for a true trend in productivity could be clearly established only by comparisons based on great quantities of installation. The requirement was met by analyzing all large, typical construction jobs of the three sizes of main most frequently occurring in the company's system and then tabulating the results into two chronological groups, construction completed prior to December 31, 1924, and Construction completed subsequent to December 31, 1924. The cleavage was made at December 31, 1924, because the year 1924 marked the end of the ten-hour day (See Appendix F) and the beginning of the eight-hour day
36 which it was thought might in the long run have an effect on man-hour productivity. This date also served to divide the period examined into two large spans of years in each of which many feet of main were installed.

The results of the analysis are shown in Table 13. This tabulation gives by job the number of feet of 10-, 12-, and 20-inch main installed per man-hour and clearly indicates the calculation by means of which this information was determined. The average hourly wage rates used in the calculation (Column E) are the wage rates that underlie the factors used to trend the account in Exhibit No. 20.

The "cost to install" figures shown in Column D of the table are in some instances the result of allocations of total costs of main installation jobs. Allocations of job costs had to be made in those instances where more than one dimension of main had been installed. They were made on the basis of cubic yards of excavation per trench foot, as established by Mr. Antonelli. (See appendix H.) Since the portion of job costs excluded from Table 13 is less than 5 percent except for three jobs, the effect of the allocations on results is not great; in most instances the amount allocated was less than 1 percent.

Table 14 is a recapitulation of the figures shown on Table 13. It is to be noted that the number of jobs analyzed for 10-, 12-, and

20-inch main were 21, 14, and 5, respectively, and that, in the order given, the years they cover range from 1905 to 1937,
37 from 1910 to 1936, and from 1911 to 1925. In other words, the analysis of 10-inch main covers the greatest number of jobs and the longest period, and the analysis of the 20-inch main the least number and the shortest period.

38 TABLE 13.—*Mains—Construction—Determination of the number of feet of 10-, 12-, and 20-inch main installed per man-hour in the years prior and subsequent to Dec. 31, 1924*

10-INCH

| Year installed | Line number | Feet of pipe installed | Cost to install | Average hourly wage-rate (Appendix G) | Man-hours expended | Feet of main installed per man-hour |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) (D÷E) | (G) (C÷F) |
| 1905 | [1] 13 | 107,950 | $41,021 | $0.192 | 213,652 | 0.505 |
| 1905 | [2] 18 | 92,689 | 45,846 | .192 | [3] 238,782 | .388 |
| 1908 | [2] 27 | 90,167 | 28,060 | .212 | 132,361 | .681 |
| 1908 | [2] 28 | 97,944 | 30,211 | .212 | 142,505 | .687 |
| 1910 | [2] 48 | 19,739 | 9,301 | .215 | 43,262 | .456 |
| 1910 | [2] 51 | 40,171 | 17,933 | .215 | 83,411 | .481 |
| 1910 | [1] 52 | 85,398 | 31,628 | .215 | 147,111 | .580 |
| 1911 | [1] 42 | 1,497 | 713 | .219 | 3,258 | .459 |
| 1912 | [1] 55 | 254,630 | 166,269 | .220 | 755,770 | .336 |
| 1912 | [2] 68 | 70,127 | 26,862 | .220 | 122,102 | .574 |
| 1913 | [1] 4 | 14,336 | 8,564 | .225 | 38,064 | .376 |
| 1914 | [1] 79 | 6,141 | 1,884 | .224 | 8,415 | [4] .729 |
| 1916 | [2] 107 | 16,463 | 8,689 | .244 | 35,614 | .462 |
| 1920 | [2] 128 | 52,986 | 61,591 | .389 | 158,333 | .334 |
| 1921 | [1] 139 | 6,992 | 8,296 | .330 | 25,140 | [4] .278 |
| Prior to 12/31/24 | | 957,230 | 486,874 | .227 | 2,147,780 | .445 |
| 1925 | [2] 166 | 33,704 | 398794 | .412 | 96,588 | [4] .348 |
| 1925 | [1] 162 | 10,150 | 9,765 | .412 | 23,792 | .426 |
| 1927 | [2] 177 | 3,252 | 1,804 | .440 | 4,101 | .793 |
| 1929 | [2] 180 | 26,773 | 8,971 | .440 | 20,390 | [3] 1.313 |
| 1929 | [2] 181 | 50,305 | 25,263 | .440 | 57,416 | .876 |
| 1937 | [2] 200 | 39,192 | 19,948 | .558 | 35,752 | 1.096 |
| Subsequent to 12/31/24 | | 163,376 | 105,547 | .444 | 237,949 | .686 |

[1] Indicates screw joint.
[2] Indicates dresser coupled joint.
[3] Maximum.
[4] Minimum.

38 TABLE 13.—*Mains—Construction—Determination of the number of feet of 10-, 12-, and 20-inch main installed per man-hour in the years prior and subsequent to Dec. 31, 1924*—Continued

39 12-INCH

| Year installed | Line number | Feet of pipe installed | Cost to install | Average hourly wage-rate (Appendix G) | Man-hours expended | Feet of main installed per man-hour |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) (D÷E) | (G) (C÷F) |
| 1910 | [1] 32 | 60,664 | $50,068 | $0.215 | 232,874 | [4] 0.2605 |
| 1910 | [2] 39 | 82,676 | 59,454 | .215 | 234,671 | .3523 |
| 1911 | [1] 42 | 108,101 | 60,860 | .219 | 277,903 | .3890 |
| 1912 | [1] 57 | 161,672 | 91,869 | .220 | 417,588 | .3872 |
| 1913 | [1] 4 | 14,055 | 9,924 | .225 | 44,107 | .3187 |
| 1923 | [1] 151 | 60,336 | 74,937 | .329 | 227,774 | .2649 |
| 1923 | [1] 154 | 30,825 | 28,098 | .329 | 85,407 | .3609 |
| 1924 | [1] 156 | 64,079 | 71,614 | .383 | 186,984 | .3427 |
| 1924 | [1] 32 | 25,900 | 20,247 | .383 | 52,866 | [1] .4899 |
| 1924 | [1] 117 | 99,129 | 78,144 | .383 | 204,034 | .4858 |
| Prior to 12/31/24 | | 707,437 | 536,220 | .273 | 1,964,208 | .3602 |
| 1925 | [1] 8 | 48,815 | 31,186 | .412 | 75,696 | .6449 |
| 1925 | [1] 166 | 22,757 | 30,928 | .412 | 75,070 | [1] .2952 |
| 1926 | [1] 193 | 58,396 | 30,170 | .483 | 62,466 | [1] .9348 |
| 1926 | [1] 192 | 501,883 | 572,027 | .483 | 1,184,322 | .4238 |
| Subsequent to 12/31/24 | | 631,251 | 664,314 | .475 | 1,397,554 | .4517 |

40 20-INCH

| | | | | | | |
|---|---|---|---|---|---|---|
| 1911 | [1] 45 | 125,897 | $132,148 | $0.210 | 603,416 | 0.2086 |
| 1913 | [1] 4 | 100,534 | 133,325 | .225 | 592,558 | .1697 |
| 1916 | [2] 106 | 104,365 | 143,333 | .244 | 587,433 | .1777 |
| 1924 | [1] 155 | 80,619 | 134,143 | .383 | 350,244 | .2302 |
| Prior to 12/31/24 | | 411,415 | 542,950 | .254 | 2,133,651 | .1928 |
| 1925 | [1] 162 | 423,886 | 908,240 | .412 | 2,204,467 | .1923 |

[1] Indicates screw joint.
[2] Indicates dresser coupled joint.
[3] Maximum.
[4] Minimum.
[5] Indicates welded joint.

41 TABLE 14.—*Mains—Construction—Comparison of feet of 10-, 12-, and 20-inch main installed per man-hour subsequent to and prior to Dec. 31, 1924*

| Dimension of main in inches | Mains installed subsequent to or prior to Dec. 31, 1924 | Span of years | Number of jobs | Number of feet installed | Cost to install | Feet of pipe installed per man-hour | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Average | Maximum | Minimum |
| 10 | Subsequent | 1925-1937 | 6 | 163,376 | $105,547 | 0.6866 | 1.3130 | 0.349 |
| | Prior | 1905-1921 | 15 | 957,230 | 486,874 | .4457 | .7298 | .278 |
| | Increased productivity per man-hour in later period | | | | | .2409 | .5832 | .070 |
| 12 | Subsequent | 1925-1936 | 4 | 631,251 | 664,314 | .4517 | .9348 | .293 |
| | Prior | 1910-1924 | 10 | 707,437 | 536,220 | .3602 | .4899 | .246 |
| | Increased productivity per man-hour in later period | | | | | .0915 | .4449 | .047 |
| 20 | Subsequent | -1925 | 1 | 423,886 | 908,240 | .1923 | .1923 | .192 |
| | Prior | 1911-1924 | 4 | 411,415 | 542,950 | .1928 | .2302 | .167 |
| | Increased productivity per man-hour in later period | | | | | (.0005) | (.0379) | .025 |

42 MAINS-EQUIPMENT

Mains-Equipment is the largest of the company's accounts chargeable with equipment costs. Primarily, it contains the cost of pipe, valves and fittings that go into main lines. From an Original Cost of $10,225,450, this account was trended to $13,360,169, an amount $3,134,719 or 30 percent in excess of that Original Cost.

In the exposition of this account, which follows, the factors used to trend its Original Cost in Exhibit No. 20 are explained, the points of difference between this account and the Well-Construction and Mains-Construction Accounts are noted, the inherent fallacy of the factors used to trend this account are pointed out, and finally, a comparison of pipe prices adjusted to reveal the effect of the trend with the pipe prices shown in the Estimated Cost of Reproduction New offered by Mr. George I. Rhodes for the Company, is presented. The comparison conclusively shows the error of the trending.

*The Development of the Trend Factors.*

The mechanics by which trending was accomplished need not again be discussed; they are the same for this account as for Well-Construction and Mains-Construction. Attention may be immediately directed to the basis for the trend factors.

The data underlying Exhibit No. 20 show that the factors developed to trend Mains-Equipment are composites derived
43 by combining a Fittings Trend and a Line-Pipe Trend weighted in the ratio of 13½ and 86½ percent, respectively, for each of the years from 1892 to 1938 (See Appendix I). The Fittings Trend was derived from a weighting of couplings and clamps and other materials, in the ratios of 89, 5½ and 5½ percent, respectively, and the Line-Pipe Trend from the arithmetical average of the cost per ton each of 2, 3, 4, 6, and 8 inch pipe. Since the Line-Pipe Trend is given a weighting nearly equal to seven-eighths of the whole, its examination is of uppermost importance.

The Line-Pipe Trend for the period prior to the year 1900 was based upon the price of wrought iron pipe; for the period 1900 to 1902, upon the price of steel pipe; and for the years subsequent to 1902, upon the price of steel screw pipe, f. o. b. destination. Where possible the prices used were those paid by the Hope company, but in many instances they were not, as a photostatic copy of the work sheet for 2-inch pipe reproduced here as Appendix J, shows. The company purchased no 2-inch pipe after 1915, yet a price for that size of pipe continued to be used in developing the yearly trend factor for the years 1915 to 1938. That price was the price paid by Peoples Natural Gas Company, an affiliate of the Hope company, or a price developed by interpolation.

The trending of Mains-Equipment, being a trending of material costs, presented a somewhat different problem for examination than the trending of Producing Gas Wells-Well Construction and Mains-Construction. In the case of those accounts the ques-
44 tion raised was that the man-hours expended in years prior to 1938 were not the equivalent of the man-hours of 1938 and that, therefore, those accounts should not be trended by factors based upon hourly wage-rates alone. A question similar to that, as to whether the material purchased in the years prior to 1938 is the equivalent of material purchased in 1938, might also be raised (The United States Steel Corporation indicate a substantial improvement has been accomplished in the making of steel pipe—See Appendix K), but it is not susceptible of quantitative proof

and has not been pursued. The examination into the propriety of the factors used to trend Mains-Equipment has been confined to the question of whether the prices of the sizes upon which the Line-Pipe Trend were predicated are representative of pipe actually charged to the account.

Table 15 shows that about 5 percent of the cost in the Mains-Equipment Account represent mains 8 inches or less in diameter and that the remaining 95 percent of the cost represents mains ranging from 10 to 20 inches in diameter (Appendix L). Since the Line-Pipe Trend is based on averages of the price of 2, 3, 4, 6, and 8 inch pipe only, it clearly is not representative of the account. Notwithstanding this fact, the trend might nevertheless be acceptable if prices for all sizes of pipe had fluctuated throughout the years in unison and to the same degree, but this does not appear to have been the case.

45 TABLE 15.—*Mains—Equipment—Main line 8 inches and less in diameter and greater than 8 inches in diameter, as at Dec. 31, 1938—Total book cost and reproduction cost new per Rhodes' appraisal*

| | Book cost [1] | |
|---|---|---|
| | Amount | Percent |
| Lines 8 inches and less | $433,943 | 5.2 |
| Lines greater than 8 inches | 7,833,825 | 94.8 |
| | 8,267,768 | 100.0 |
| | Rhodes' appraisal [2] | |
| | Amount | Percent |
| Lines 8 inches and less | $487,781 | 5.6 |
| Lines greater than 8 inches | 8,161,815 | 94.4 |
| | 8,649,596 | 100.0 |

[1] For details see Appendix 1.
[2] For details see pp. 200-2, Part D, Exhibit 16.

46 *Comparison of Prices Paid for Pipe.—Trended with Prices per Rhodes' Appraisal.*

Table 16 is a comparison of the price per foot of pipe 10 to 20 inches in diameter as determined from actual purchases, trended per Exhibit No. 20, and as shown in the company's Reproduction Cost New Appraisal presented by Mr. Rhodes (Exhibit No. 16, Part D). In this table are listed, in the aggregate

amount of $7,808,500, sixty important purchases of pipe, of which the earliest was made in 1902 and the latest in 1936. The price per foot of each purchase trended is compared individually with the price for the same size and kind of pipe as shown in the Rhodes' Appraisal.

The price per foot trended per Exhibit No. 20 was obtained by dividing the average actual cost per foot for pipe, f. o. b. destination, with the Line-Pipe Trend factor (Appendix I) for the year in which the purchase was made. The Line-Pipe Trend factor is precisely appropriate for this purpose since it is the component of the composite trend factor used in Exhibit No. 20 that reflects the changes in pipe prices.

The comparison shows that the actual cost trended is higher than the Rhodes' price in all instances save one. The exception was a purchase made at a special discount. As Column L of Table 16 indicates, the excess of cost trended over the Rhodes' price is in most instances a large one.

TABLE 16.—*Mains—Equipment.—Cost of important purchases of main line pipe trended to 1938 prices by means of Exhibit No. 20 line-pipe trend factors and then compared with Rhodes' reproduction cost new appraisal prices 1902–36.*

[Source of basic data: Work sheets underlying Exhibit No. 20]

| Source | | Year of purchase | Size and type of pipe | | Weight per foot in pounds | Number of feet | Cost f. o. b. destination | | Exhibit No. 20 line-pipe trend factor (Appendix D) | Average cost per foot trended | Pipe cost per foot f. o. b. destination per Rhodes reproduction cost, new appraisal | Excess of pipe cost per foot as trended over Rhodes price per foot | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Diameter | | | | Total | Average cost per foot | | | | Amount | In percent of Rhodes appraisal prices |
| Book | Page | | (Inches) | Type | | | | | | | | | |
| (A) | | (B) | (C) | | (D) | (E) | (F) | (G). (F÷E) | (H) | (I) (G÷H) | (J) | (K) (I–J) | (L) (K÷J) |
| 1 | 28 | 1902 | 10 | Screw | 41.85 | 11,692.5 | $14,095.97 | $1.2051 | 70.1 | $1.7191 | $1.4650 | $0.2541 | 17 |
| 1 | 31 | 1902 | 12 | PE | 49.56 | 35,777.9 | 49,015.43 | 1.3700 | 70.1 | 1.9544 | 1.6420 | .3124 | 19 |
| 1 | 45 | 1903 | 10 | Screw | 41.85 | 73,721.9 | 91,183.57 | 1.2369 | 68.1 | 1.8163 | 1.4650 | .3513 | 24 |
| 1 | 49 | 1903 | 12 | PE | 49.56 | 55,908.8 | 76,979.84 | 1.2769 | 68.1 | 2.0219 | 1.6420 | .3799 | 23 |
| 1 | 48 | 1902 | 18 | PE | 70.58 | 117,600.11 | 301,058.14 | 2.5600 | 70.1 | 3.6519 | 2.5090 | 1.1429 | 46 |
| 1 | 65 | 1903 | 16 | PE | 62.57 | 281,080.0 | 520,864.91 | 1.8531 | 68.1 | 2.7211 | 2.1960 | .5251 | 24 |
| 1 | 81 | 1903 | 18 | PE | 70.58 | 121,612.11 | 310,876.18 | 2.5563 | 68.1 | 3.7537 | 2.5090 | 1.2447 | 50 |
| 1 | 055 | 1904 | 10 | PE | 40.48 | 174,369.0 | 190,010.37 | 1.0897 | 61.6 | 1.7690 | 1.2980 | .4710 | 36 |
| 1 | 067 | 1904 | 16 | PE | 62.57 | 147,493.4 | 285,401.88 | 1.7904 | 61.6 | 2.9211 | 2.1960 | .7251 | 33 |
| 1 | 076 | 1904 | 18 | PE | 70.58 | 93,642.3 | 228,954.30 | 2.4450 | 61.6 | 3.9692 | 2.5090 | 1.4602 | 58 |
| 2 | 044 | 1907 | 10 | Screw | 41.85 | 45,181.8 | 52,171.95 | 1.1462 | 59.3 | 1.9329 | 1.4650 | .4679 | 32 |
| 2 | 045 | 1907 | 12 | PE | 49.56 | 10,017.4 | 13,924.04 | 1.3900 | 59.3 | 2.3440 | 1.6420 | .7020 | 43 |
| 2 | 057 | 1907 | 18 | PE | 70.58 | 98,569.14 | 226,777.47 | 2.2000 | 59.3 | 3.8786 | 2.5090 | 1.3696 | 55 |
| 3 | 52 | 1909 | 10 | PE | 40.48 | 33,826.0 | 27,546.84 | 1.1100 | 57.8 | 1.9204 | 1.2980 | .6224 | 48 |
| 3 | 54 | 1909 | 12 | PE | 49.56 | 5,464.8 | 7,067.16 | 1.2932 | 57.8 | 2.2376 | 1.6420 | .5953 | 36 |
| 3 | 117 | 1910 | 10 | PE | 22.86 | 107,358.6 | 57,488.58 | .5355 | 55.3 | .9684 | .7910 | .1774 | 22 |
| 3 | 121 | 1910 | 10 | PE | 34.24 | 51,408.8 | 48,984.32 | .9528 | 55.3 | 1.7230 | 1.1020 | .6210 | 56 |
| 3 | 128 | 1910 | 10 | PE | 40.48 | 64,142.9 | 70,159.39 | 1.0938 | 55.3 | 1.9779 | 1.2980 | .6799 | 52 |
| 3 | 125 | 1910 | 16 | PE | 42.05 | 11,912.3 | 13,802.54 | 1.1587 | 55.3 | 2.0953 | 1.5320 | .5633 | 37 |
| 3 | 145 | 1910 | 20 | PE | 65.70 | 117,356.4 | 190,117.42 | 1.6200 | 55.3 | 2.9295 | 2.3380 | .5915 | 25 |
| 4 | 76 | 1911 | 10[1] | PE | 34.24 | 13,527.11 | 11,784.10 | .8711 | 55.4 | 1.5724 | 1.1020 | .4704 | 43 |
| 4 | 89 | 1911 | 12[1] | PE | 43.77 | 48,088.3 | 51,867.30 | 1.0785 | 55.4 | 1.9468 | 1.4570 | .4898 | 34 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 95 | 1911 | 20 | PE | 65.70 | 8,521.8 | 13,805.11 | 1.6200 | 55.4 | 2.9242 | 2.3380 | .5862 | 25 |
| 5 | 59 | 1912 | 10 | PE | 28.03 | 83,990.7 | 49,535.02 | .5898 | 50.3 | 1.1726 | .9710 | .2016 | 21 |
| 5 | 71 | 1912 | 16 | PE | 42.05 | 140,554.5 | 84,697.47 | .7661 | 50.3 | 1.5231 | 1.5020 | .0089 | |
| 5 | 72 | 1912 | 16 | PE | 52.35 | 5,650.9 | 6,324.66 | 1.1192 | 50.3 | 2.2252 | 1.8370 | .3882 | 21 |
| 5 | 78 | 1912 | 20 | PE | 65.70 | 43,240.2 | 67,943.03 | 1.5713 | 50.3 | 3.1239 | 2.3380 | .7859 | 34 |
| 6 | 76 | 1913 | 10¾OD | PE | 28.03 | 38,118.2 | 21,645.73 | .5679 | 54.0 | 1.1175 | .9710 | .1425 | 15 |
| 6 | 83 | 1913 | 10 | PE | 40.48 | 36,372.4 | 29,762.06 | .8183 | 51.0 | 1.6046 | 1.2980 | .3066 | 24 |
| 6 | 93 | 1913 | 12 | Screw | 51.15 | 16,382.8 | 18,243.93 | 1.1136 | 51.0 | 2.1835 | 1.8150 | .3385 | 18 |
| 6 | 120 | 1913 | 20 | PE | 65.70 | 56,592.3 | 79,792.29 | 1.4100 | 51.0 | 2.7647 | 2.3380 | .4267 | 18 |
| 6 | 125 | 1917 | 20 | Screw | 80.00 | 3,546.0 | 10,607.75 | 2.9915 | 51.0 | 5.8657 | 4.5350 | 1.3307 | 29 |
| 7 | 33 | 1914 | 10¾OD | PE | 28.03 | 12,002.6 | 6,000.24 | .4999 | 49.2 | 1.0161 | .9710 | .0451 | 05 |
| 7 | 19 | 1915 | 10¾OD | PE | 28.03 | 14,380.8 | 7,305.36 | .5080 | 47.5 | 1.0695 | .9710 | .0985 | 10 |
| 48 7 | 21 | 1915 | 101D | PE | 28.035 | 31,527.11 | 16,541.79 | .5240 | 47.5 | 1.1032 | .9710 | .1322 | 14 |
| 8 | 236 | 1916 | 10¾ | PE | 28.035 | 212,900.7 | 165,232.74 | .7761 | 62.7 | 1.2378 | .9710 | .2668 | 27 |
| 8 | 266 | 1916 | 16 | PE | 42.05 | 32,975.8 | 51,576.85 | 1.5641 | 62.7 | 2.4946 | 1.5320 | .9626 | 63 |
| 8 | 272 | 1916 | 20 | PE | 65.70 | | | 2.2000 | 62.7 | 3.5088 | 2.3380 | 1.1708 | 50 |
| 9 | 152 | 1917 | 10¾ | PE | 28.035 | 54,257.3 | 61,686.75 | 1.1369 | 87.0 | 1.3098 | .9710 | .3358 | 35 |
| 9 | 168 | 1917 | 16 | PE | 42.05 | 5,319.0 | 8,417.09 | 1.5825 | 87.0 | 1.8190 | 1.5320 | .2870 | 19 |
| 10 | 116 | 1918 | 10 | PE | 28.03 | 166,797.4 | 251,488.59 | 1.5078 | 112.8 | 1.3367 | .9710 | .3657 | 38 |
| 11 | 16 | 1920 | 20 | PE | 65.70 | 4,747.1 | 16,926.12 | 3.5656 | 112.2 | 3.1779 | 2.3380 | .8399 | 36 |
| 11 | 21 | 1921 | 16 | PE | 52.35 | 151,627.6 | 324,826.41 | 2.1437 | 111.5 | 1.9226 | 1.8370 | .0856 | 05 |
| 11 | 17 | 1923 | 12¾ | PE | 41.51 | 54,010.8 | 102,170.83 | 1.8917 | 99.4 | 1.9031 | 1.3650 | .5381 | 39 |
| 11 | 19 | 1923 | 16 | PE | 62.57 | 32,020.2 | 86,567.23 | 2.7035 | 99.4 | 2.7198 | 2.1960 | .5238 | 24 |
| 11 | 12 | 1924 | 10¾ | PE | 34.24 | 60,070.8 | 87,751.50 | 1.4610 | 96.2 | 1.5187 | 1.1020 | .4167 | 38 |
| 11 | 28 | 1924 | 12¾ | PE | 41.51 | 215,177.0 | 342,447.68 | 1.5907 | 96.2 | 1.6535 | 1.3650 | .2885 | 21 |
| 11 | 37 | 1924 | 20 | PE | 65.70 | 94,020.0 | 283,000.80 | 3.0104 | 96.2 | 3.1293 | 2.3380 | .7913 | 34 |
| 11 | 18 | 1925 | 10¾ | PE | 34.24 | 31,544.1 | 40,626.21 | 1.2879 | 93.2 | 1.3819 | 1.1020 | .2799 | 25 |
| 11 | 26 | 1925 | 12¾ | PE | 41.51 | 36,435.1 | 54,642.40 | 1.4997 | 93.2 | 1.6091 | 1.3650 | .2441 | 18 |
| 11 | 47 | 1925 | 16 | PE | 52.35 | 161,734.3 | 343,523.50 | 2.1240 | 93.2 | 2.2790 | 1.8370 | .4420 | 24 |
| 11 | 94 | 1925 | 20 | PE | 65.70 | 490,485.3 | 1,375,730.10 | 2.8048 | 93.2 | 3.0094 | 2.3380 | .6714 | $^{12}/_{20}$ |
| 11 | 6 | 1927 | 10¾ | PE | 34.24 | 4,510.7 | 5,443.58 | 1.2068 | 89.7 | 1.3454 | 1.1020 | .2434 | $^{2}/_{2}$ |
| 11 | 10 | 1927 | 18 | PE | 70.58 | 5,385.10 | 14,578.61 | 2.7068 | 89.7 | 3.0176 | 2.5080 | .5096 | $^{2}/_{0}$ |
| 11 | 11 | 1928 | 12¾ | PE | 41.51 | 25,006.6 | 34,270.22 | 1.3705 | 84.4 | 1.6238 | 1.3650 | .2588 | $^{1}/_{0}$ |
| 11 | 10 | 1929 | 10¾ | PE | 34.24 | 80,408.8 | 85,767.75 | 1.0666 | 87.7 | 1.2162 | 1.1020 | .1142 | $^{1}/_{0}$ |

[1] Lap-weld pipe, unless otherwise noted.
[2] Due to 2½% discount.

47 TABLE 16.—*Mains—Equipment.—Cost of important purchases of main line pipe trended to 1938 prices by means of Exhibit No. 20 line-pipe trend factors and then compared with Rhodes' reproduction cost new appraisal prices 1902–36*—Continued

[Source of basic data: Work sheets underlying Exhibit No. 20]

| Source | | Year of purchase | Size and type of pipe | | | Number of feet | Cost f. o. b. destination | | Exhibit No. 20 line-pipe trend factor (Appendix I) | Average cost per foot trended | Pipe cost per foot f. o. b. destination per Rhodes reproduction cost, new appraisal | Excess of pipe cost per foot as trended over Rhodes price per foot | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Diameter | | Weight per foot in pounds | | Total | Average cost per foot | | | | Amount | In percent of Rhodes appraisal prices |
| Book | Page | | (Inches) | Type | | | | | | | | | |
| (A) | | (B) | (C) | | (D) | (E) | (F) | (G) (F÷E) | (H) | (I) (G÷H) | (J) | (K) (I−J) | (L) (K÷J |
| 11 | 18 | 1929 | 16 | PE | 52.35 | 7,511.10 | $13,999.62 | $1.8637 | 87.7 | $2.1250 | $1.8370 | $0.2880 | 16 |
| 11 | 20 | 1929 | 18 | PE | 70.58 | 3,813.4 | 9,322.09 | 2.4446 | 87.7 | 2.7875 | 2.5060 | .2785 | 11 |
| 11 | 23 | 1929 | 20 | PE | 78.59 | 1,534.8 | 4,355.92 | 2.8383 | 87.7 | 3.2364 | 2.7930 | .4434 | 16 |
| 12 | 34 | 1936 | 12¾ | PE [1] | 41.51 | 131,571.4 | 178,010.22 | 1.3530 | 91.6 | 1.4771 | 1.4210 | .0561 | 4 |
| 12 | 57 | 1936 | 12¾ | PE [1] | 49.56 | 377,364.11 | 623,840.92 | 1.6532 | 91.6 | 1.8048 | 1.7100 | .0948 | 6 |

[1] Seamless, Penola coated.

49 OTHER ACCOUNTS

The three sections of this report that immediately precede this one are devoted to three of the eight plant accounts listed in Table 1; this section is devoted to the remaining five, which represent plant of an Original Cost of $30,980,563 that was trended to $42,243,237. No analysis of these five accounts was made. A brief explanation of the basis upon which they were trended follows.

*Producing Gas Wells—Well Equipment.*

Producing Gas Wells—Well Equipment was increased in the amount of $2,495,792 by trending, from an Original Cost of $8,168,191 to $10,663,983. The series of factors employed to trend the account were composites made up of a Casing and Tubing Trend and a Closing-in Equipment Trend weighted in the ratios of .957 and .043, respectively. The trending for casing and tubing from 1902 to 1938 was based on the arithmetical average trend of a ton each of 2- and 3-inch tubing and 6⅝-, 8¼-, and 10-inch casing as determined primarily from the average delivered prices paid by the company. Where prices were not available from company records, supplementary prices were used.

*Field Lines—Construction.*

50 $2,962,099 by trending, from an Original Cost of $4,076,871 to $7,038,970. The factors used to trend this account are the same as those used to trend Mains—Construction.

*Field Lines—Equipment.*

Field Lines—Equipment was increased in the amount of $2,225,387 by trending, from an Original Cost of $8,279,885 to $10,505,272. Like the factors used to trend Mains-Equipment, the factors developed for this account are composites consisting of Pipe Trends and Fittings Trends weighted in the ratios of .865 and .135, respectively. The Pipe Trends are the same as those used to develop the Trend Factor for Mains-Equipment; the Fittings Trends are different. The composite trend factors for both accounts are similar in amounts. For the years subsequent to 1910 they never vary more than 1.0%, except for 1913 when the difference between them is 1.1%.

*Compressor Station Structures.*

Compressor Station Structures was increased in the amount of $686,840 by trending, from an Original Cost of $1,811,605 to

$2,498,445. This account includes both labor and material costs in proportions not readily ascertainable. Its trend factors are predicated upon the pricing of four structures, each typical of a different kind of construction, priced for each year to reflect the prevailing labor and material costs of that year.

51 *Compressor Station Equipment.*

Compressor Station Equipment was increased in the amount of $2,892,556 by trending, from an Original Cost of $8,644,011 to $11,536,567. This account includes both labor and material costs in proportions not readily ascertainable. Its trend factors are predicated upon a pricing of equipment in five stations, each typical of a different kind of equipment, priced for each year to reflect the prevailing labor and material prices of that year.

52 Summary

The Original Cost revised of the company's plant as presented in Exhibit No. 20, which amounts to $69,735,637, is trended in that Exhibit by means of factors to $105,101,912, purportedly for the purpose of translating it into its equivalent at "1938 prices." Most of the increase, which amounts to $35,366,275, is contained in several of the company's thirty-two plant accounts and three of them were chosen for detailed examination. Two of the three selected contain labor costs and one material costs, and combined they account for more than two-thirds of the increase due to trending. Other large accounts were also examined, cursorily, and they were found to have been trended in much the same manner as the three to which greater attention was paid.

The trend factors of the three accounts chosen for examination were first studied to get a full understanding of their formulation and composition and then the accounts themselves were analyzed. The study of the trend factors revealed that their application, in each instance, might produce quite distorted results and the analyses of the accounts were undertaken to obtain data for tests by means of which it could be determined whether or not this was so.

Five tests embracing substantial amounts of construction were made and are here presented. They thoroughly demonstrate that the trend factors far overreach reasonable bounds. In the
53 case of Producing Gas Wells-Well Construction and Mains-Construction which are labor cost accounts, their unreli-

ability was found to rest in their predication upon hourly wage-rates only, to the neglect of hourly productivity which is greater in 1938 than in earlier years. In the case of Mains-Equipment, a material cost account, their unreliability rests in their being based upon the cost of material not representative of the materials actually charged to the account. The trending of the labor costs capitalized, at 1938 hourly wage-rates, many more man-hours than would actually be expended to construct the property in 1938, in the manner and with the personnel of that year. The trending of the material costs produced too high a result because the material trend factors were based upon the prices of materials whose prices had risen relatively higher by 1938 than had the prices of the materials truly representative of the items actually charged to the accounts.

All of the tests presented were prepared from data compiled from Exhibit No. 20, the working papers and records that support it, or from Rhodes' Appraisal. This implies that the figures for 1938 which have been used in the comparisons are from these sources also, and they are. Their use in the circumstances was desirable and necessary; it does not signify their acceptance as a true guide to value or for any other purpose.

Finally it should be noted that if the intangible production costs previously charged to expense by the company do not represent a proper element of original cost, they do not represent a proper element of original cost trended. Many millions of dollars of such items are included in the trended figures.

54

VICTOR G. GOUGH,
Victor G. Gough,
*Chief Examiner of Accounts.*

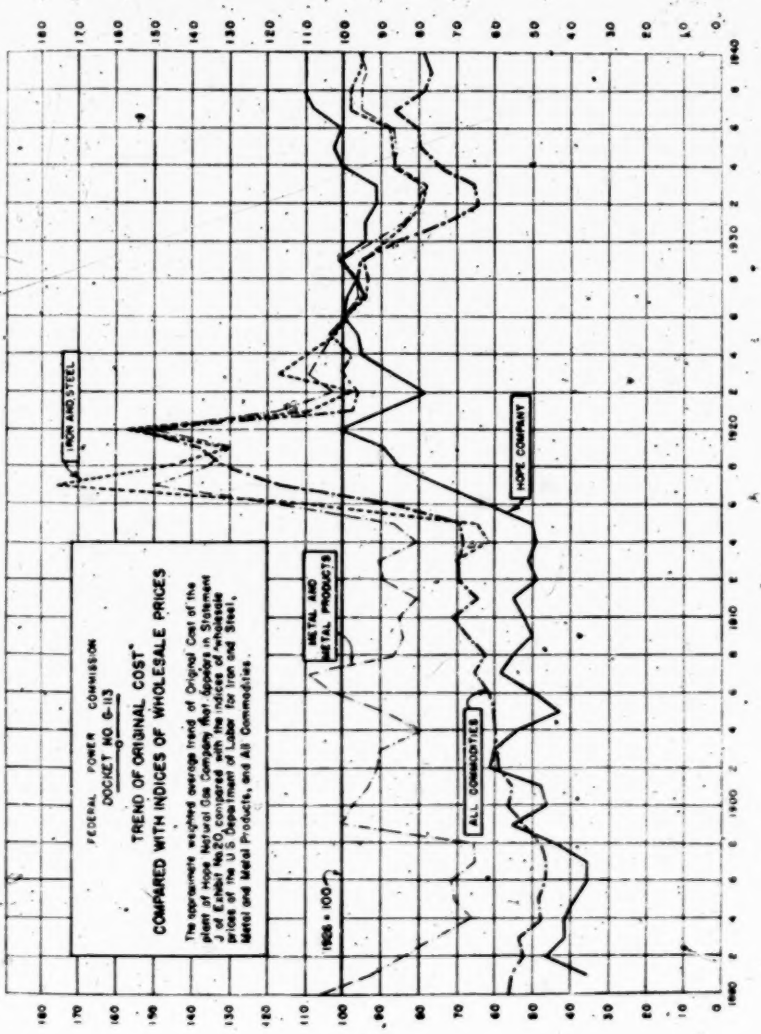
WASHINGTON, *March 31, 1941.*

Approved:

CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance, and Rates.*

[Appendix pages 55 to 78 omitted.]

1 **EXHIBIT NO. 74-A.—TREND OF ORIGINAL COST COMPARED WITH INDICES OF WHOLESALE PRICES, F. P. C. WITNESS GOUGH**



## EXHIBIT NO. 43.—ESTIMATED RECOVERABLE GAS RESERVES AND PAST PRODUCTION OF THE HOPE NATURAL GAS COMPANY AS OF DEC. 31, 1938, VOLUME I, F. P. C. WITNESS ROSS

[Pages I to III omitted]

### WRITTEN STATEMENT

#### INTRODUCTION

This report presents an estimate of the developed, recoverable natural gas reserves and past production of the operated fee lands and leaseholds of the Hope Natural Gas Company as of December 31, 1938. It consists of three volumes.

Volume I comprises a statement of the conclusions drawn from an exhaustive study of the recoverable gas reserves and past production of the company, the source of the data used, and the procedure followed, with sample illustrations.

Volume II is primarily a statistical section containing a summary in which are given by geographical pool or producing areas: (1) The estimated production prior to 1913, (2) the production by years from 1913 to 1938, inclusive, and (3) the estimated future recoverable gas reserves. This summary is preceded by a recapitulation showing the same information in very condensed form.

Volume III contains summaries in which are analyzed in detail by geographical sand pools the estimated gas reserves which are recoverable from (A) present drilled wells, (B) from deeper sands in present drilled wells, (C) from additional locations on operated acreage, and (D) from additional locations on "In Lieu of Drilling" acreage.

There is included as an appendix of Volume I a tabulation entitled "Present Drilled Wells" showing a list of present drilled wells of the company as of December 31, 1938, included in this estimate of the remaining gas reserves.

There is also included as an appendix of Volume I, a similar tabulation entitled "Dead Wells on Active Acreage," showing a list of those wells of the company, which had been either sold

or abandoned prior to December 31, 1938, but which were located on acreage that was still operated on December 31, 1938.

2 Affixed to Volume III as Appendix i of this exhibit is a tabulation "Summary of the Operations of Gas Storage Projects."

DATA USED IN THE STUDY.

*Source of Data.*

The operating records of the Hope Natural Gas Company were the principal source of the information used in the preparation of this exhibit. These records include well data cards maintained by the engineering department, production and pressure data filed in the production department, well pockets containing field tickets, and miscellaneous information kept in the general files, and a report compiled by Mr. Ralph E. Davis in 1924. Reference has also been made to the records and maps of the United States Geological Survey and certain West Virginia State agencies.

*Well Data.*

Basic factual information concerning annual production, rock pressures, and general history of each sand that produced gas in each well was transcribed separately from the company's records to a well-data sheet prepared by engineers of the Federal Power Commission. A sample form of this sheet is illustrated on the following page. On this data-sheet were entered such information as the name of the company's operating district, county, well number, farm name, lease number, map index, producing formations, total depth, date of completion or purchase, date of abandonment, elevation of well if known, initial production and initial rock pressure. Deepening or plugging-back data and other pertinent information, appearing on the back of the well cards, were entered under "Remarks." The compilation of these data by sands or casing or tubing strings involved some 14,000 pages of basic information pertinent to the gas reserve study.

*Production Data.*

As a general rule, the Hope Natural Gas Company does not meter the production of gas from its wells or leases. The company does have, however, a number of leases in which

4 [page 3 omitted] the royalty payments are made on a volumetric basis and from which gas is metered.

In the absence of meters the company calculates the production of its wells by the "minute-rise" formula. This method of gas measurement, which is used generally throughout the Appalachian region, is predicated on the theory that the rise in pressure per minute after a producing well is closed indicates the rate at which gas was producing in that well prior to closing it in. This method uses the volume of the casing or tubing as a unit of measure and, with the application of Boyle's law, reflects the volume of gas produced under operating conditions at the time of the test.

Although the company began taking minute-rise tests in 1913 of all its wells, the volumes were not computed until 1924, when Mr. Ralph E. Davis, Consulting Engineer and Geologist, was engaged to establish depletion and depreciation rates of the producing properties for Federal income tax purposes. Since 1924 the company has calculated production annually.

Since the annual calculated production of all wells of the Hope Natural Gas Company represents the only available information as to volumes of gas produced, these volumes of calculated production have been accepted by engineers and geologists of the Federal Power Commission as being based upon minute-rise tests, and utilized by them in the computation of the gas reserves. These volumes were transcribed from the company's record to the well-data sheets previously described, by years, from 1913 through 1938. There was also tabulated in connection with the production the number of days that each well was open to the pipeline system, which represents the utilization of each well.

*Rock Pressures.*

The Hope Natural Gas Company recorded the rock pressures or well-head pressures of its wells once a month and made an annual rock pressure test on all wells during periods of minimum production. Generally, these annual tests were made during the latter part of August or the fore part of September. A study of the rock pressure histories indicated that the annual tests more closely reflected the actual reservoir pressures, because at the time of the year these tests were made, the wells had experienced a longer shut-in period, thus allowing for a more perfect equalization of pressure in the producing formations.

Furthermore, as stated by representatives of the company, greater care was exercised in making the annual tests than those made during the year when the wells were being operated at

greater capacity. For these reasons the annual rock pressures were utilized in estimating the gas reserves. In a few instances, however, where the annual pressures were not available, or appeared unreasonable, the monthly tests were used or the pressures were determined by interpolation.

*Maps.*

All maps used in the preparation of this report are based upon those provided by the Hope Natural Gas Company. These included principally a set of leasehold maps showing the location of operated and unoperated leaseholds and all wells ever owned by the company, and a set of working district maps showing pipe lines and well locations. Both sets of maps are of the approximate scale of two inches to one mile and show the company's coordinate grid system which provides an index to the well locations. The company's leasehold maps, reduced by photographic reproductions to a scale of approximately one inch to one mile, were used for working maps in the preparation of this exhibit.

*General Geology.*

The geology of West Virginia has been amply treated in the geological literature, particularly in the county reports of the State Geological Survey of West Virginia. Therefore this subject will be discussed here only briefly.

The natural gas fields of West Virginia are a part of the Appalachian field, which occupies a major geosyncline lying between the Appalachian Mountains on the east and the Cincinnati Arch on the west and extending continuously from the State of New York southwestward to Alabama. The sedimentary beds lying within this geosyncline have been subjected to intense folding which has resulted in the formation of anticlines and synclines whose axes are roughly parallel and extend in a general northeast, southwest direction. The West Virginia gas fields are closely related to the fields of Pennsylvania, Ohio, Kentucky, and Tennessee in that the mode of occurrence and accumulation of gas is largely similar, and the formations or horizons that produce gas are common to these states.

6 The major gas-producing horizons in West Virginia are of Pennsylvania, Mississippian, and Devonian age. The principal productive horizons from which the Hope Natural Gas Company obtains gas are the Salt, Maxon, Big Injun, Gantz, Berea, Fifty Foot, Thirty Foot, Gordon Stray, Gordon, Fourth,

Fifth, Speechley, and Benson Sands. Possibly with the exception of the Big Injun these sands are lenticular in character and exhibit considerable variation in porosity and permeability. Largely because of this and because of the absence of water generally, the gas occurs in synclines and on terraces as well as on the flanks and crests of anticlines. In fact, porosity and permeability are perhaps the two most important factors controlling the accumulation and production of gas from producing sands of West Virginia. This condition is characteristic of the producing formations of the Appalachian region and accounts in a large measure for the "spotted" areas of production.

PROCEDURE OF ESTIMATING GAS RESERVES

Although the majority of the Hope Natural Gas Company's wells are located in the northern half of the oil and gas producing region of the State of West Virginia, these wells are scattered throughout that area and do not form any one, single, continuous block of property. The producing properties of the company have ranged, and do range, in occurrence from one single well isolated miles from the nearest company well to groups of contiguous wells ranging in number from 2 to more than 500.

From a careful preliminary examination of the company's leasehold and operating maps and of the records of the wells drilled thereon, it was found impracticable to estimate the reserves underlying the company's properties as a unit, not only because of the scattered geographical location of the wells referred to above, but also because there are some 30 producing sands in West Virginia and very few of these sands extend continuously or are productive throughout the entire area or areas in which the company's properties are located.

Accordingly, it was deemed expedient for the practical purpose of preparing this reserve study to make a reasonable territorial grouping and segregation of portions of the State of West Virginia encompassing the company's producing properties into 27 units or areas. These 27 units have been termed "pool sheets." The basis underlying the division of the company's producing territory into these 27 "pool sheets" is purely one of convenience with the label meaning only that such area is involved in the determinations covered by this exhibit.

The company's gas-producing areas in each of these 27 territorial divisions were carefully studied. The producing horizons were identified from the company well records and the existence

of gas was determined from information customarily kept by natural gas producing companies, such as rock pressures, open flow tests, and records of production. During the course of these investigations it was found that the existence of producing wells proved that certain productive horizons extended over greater areas than others, that the limits of the production of gas in a given horizon had been defined in certain directions by the drilling of nonproductive wells. It was further found that in other directions the horizon had proved productive of gas at one or more other locations on company acreage. The occurrence of conditions of common pressures, and common characteristics of production existing in the wells in these areas and common formations providing the source of supply for the company's wells established a sound basis for a careful geological study of the areas adjacent to those wells.

It was found that there were many correlative characteristics pertaining to the wells in certain areas. Those wells had as their common dominant characteristic the fact that they depended upon the same sand or sands for their supply of gas and were dependent in varying degrees upon the same source of gas. The configurations of the "sand pools" were thereby defined by the natural occurrence of the supply of gas for the wells of the Hope Natural Gas Company.

As the investigations of the wells, producing horizons, and areas progressed, it was found that during the course of drilling for and production of gas from various sand pools, such operations had resulted in developing through one well the supply of gas in more than one sand pool. These investigations developed that those sand pools at different horizons were not coextensive one with another, but in some instances overlapped in varying degrees and extended over different areas. This situation gave rise to a further natural grouping of the company wells and acreage into productive areas of greater extent. These larger groupings conformed to the gas-producing areas which have been termed "pool areas."

It was considered that one-half mile was the maximum effective drainage limit of wells in West Virginia, and that
8 the use of this distance was not unreasonable for the purpose of estimating weighted average rock pressures by the isobaric method. Accordingly the wells of the Hope Natural Gas Company were grouped in designated geographical areas or "pool areas," the principal determining factor being distance between well locations.

Any well geographically located further than one-half mile from a "pool area" was considered an "Individual Well." And those wells located within the boundary of "pool areas" that have no other wells in that "pool area" producing from the same sand or sands were also considered "Individual Wells." Further, those wells located within the boundary of a "pool area" but further than one-half mile from a "sand pool," were also considered "Individual Wells."

In classifying these wells as "Individual Wells," separately from pool areas, consideration was given to such factors as location, producing sands, geological conditions, producing characteristics, rock pressure histories, and production histories. In the reserve study, each "Individual Well" was treated as a gas-producing unit.

The map presented as part of the proceedings in this case entitled "Map Showing Working Districts, Gas Wells, Pipe Lines, and Compressor Stations as of December 31, 1938," shows in color the designation, geographical location, and extent of each of these "pool areas," together with the location of other productive wells called "Individual Wells." "Sand pools" are not shown on this map because of the mechanical difficulty of reproduction on one map.

*Rock Pressure—Production Decline Method*

The proven gas reserves of the Hope Natural Gas Company were estimated by means of the rock pressure-production decline method. This method follows closely an application of Boyle's law for gases, which can briefly be stated as follows: The quantity of gas in a given volume is directly proportional to the absolute pressure, temperature being constant. Its application reflects the future recoverable reserves in underground sand
9 reservoirs by extrapolating the decline of well pressure versus cumulative production.

This method of estimating gas reserves is particularly applicable to West Virginia because of the erratic and lenticular character of the producing sands in that State, and also because of the absence of fluids which ordinarily would affect the accuracy of the method. Furthermore, the volumes of gas produced annually from each sand or sands were available by wells from 1913 to 1938, inclusive; and the annual rock pressures taken at the wellhead were also available for the corresponding sands.

The adoption of this method was made after a careful study of the available basic factual data, and of the applicability of other methods for estimating gas reserves.

For purposes of this reserve study, rock pressure data for the years 1913, 1914, 1921, 1922, 1927, 1928, 1932, 1933, 1937, and 1938 were used. Since these were years of minimum production and therefore minimum utilization for the majority of the wells of the company, the annual rock pressures for these years reflected more accurately the underground reservoir conditions than did the pressures taken during the intervening years.

The producing wells and acreage of the Hope Natural Gas Company are intermingled with those of other companies and are located both in individual areas constituted of single wells and in groups constituted of contiguous wells. In this study, wells and areas, whose locations were relatively close, were grouped according to geographical pools; and each sand pool was treated as a unit of natural gas reserve, since the gas could be withdrawn through the various wells in that area according to the methods of operation. The grouping of wells in this manner reflected underground reservoir conditions more truly than if each of the contiguous wells in that pool were treated individually. For those single wells which did not have sufficient contiguous production for the same sand, however, the gas reserves were computed for the "Individual Well" based upon a study of the rock pressures and a study of the production of that "Individual Well," or from comparable sand pool history.

10 *Sand Pools*

The first step in estimating gas reserves was the grouping of contiguous wells producing from common reservoirs into sand pools. A common reservoir has been considered to be one or more sands in a gas area, so interconnected through the bore hole of wells in that area as to permit equalization of pressures. As many as five or six sands may be producing through one string of casing, whereas originally each had been produced through a separate string of casing or tubing. Thus, by equalization of pressures through the well bore, the sands became a common sand reservoir.

Since any given well may produce through the casing from a single sand or through separate strings of casing or tubing within the well bore from one or more sands, the term "well" is used in this exhibit to denote a sand well producing through a string

of casing or tubing. For this reason, a well may appear in one or more sand pools.

The grouping of wells into sand pools involved the examination and classification of approximately 14,000 well data sheets. A sample sand pool map is illustrated on the following page. This map shows the location and serial number of all wells drilled by the company to the Gordon Sand in sand pool 2–1 Gordon.

[Page 11 omitted.]

12. *Isobaric Maps.*

The weighted average rock pressure during each of the ten years for each sand pool was determined by the use of isobaric maps. These maps were designed to show by lines of equal pressure the conditions in the sand reservoir. They were prepared by first plotting, accurately, the wells on base maps, which were drawn on a scale of approximately one inch to one mile. These base maps were prepared from photographic reproductions of the company's leasehold maps. Next, the current rock pressure of each year was plotted at the point the well is located on these maps, for each sand pool, and lines of equal pressure (isobars) were drawn to determine the areal extent of each pressure. Each area betwen the isobars was then carefully measured by means of a planimeter and the measured area thus obtained was multiplied by the mean pressure of the area to determine the weighted average pressure for each sand pool for each of the indicated years. Over 500 isobaric maps were prepared in the manner described. A sample isobaric map is illustrated on a following page. The annual rock pressures shown on this map are for 1938.

The annual calculated production was cumulated for all of the wells considered in each sand pool. This cumulative production and the weighted average pressures, together with the number of producing sand wells, were tabulated to facilitate the construction of rock pressure-production decline graphs. A sample tabulation is shown on the page following the sample isobaric map.

*Rock Pressure—Production Decline Graphs.*

A rock pressure-production decline graph was constructed for each sand pool. The weighted average rock pressure, for each of the ten years indicated, was plotted on coordinate graph paper and the rock pressure decline drawn by connecting these points. On the same graph paper the cumulative production at the end

of each year was plotted as abscissas, and against this was plotted as ordinates, the weighted average rock pressure at the end of the corresponding year as determined by the rock pressure decline graph. An example of a rock pressure-production decline graph is shown on a following page. This graph represents the rock pressure-production decline for "sand pool" 2–1–Gordon.

Examination of the graphs thus constructed disclosed that considerable variation existed in the rate of decline of pressure when plotted against production over the period extending from 1913 through 1938. In general there seemed to be a more rapid rate of decline of pressure for the volumes of gas produced
16 [pages 13 to 15 omitted] between 1913 and 1920 than between 1920 and 1930. Since the most recent operations reflect what the company may expect in the near future and since a ten-year history is considered a reasonable period of time for establishing reserves, the period from 1929 to 1938, inclusive, was used for extrapolating the curves to determine the future recoverable gas reserves. From an abandonment study of all wells abandoned by the company, it was found that 30 pounds was a reasonable average abandonment pressure for all wells producing from sands other than the Speechley and Benson sands. For the Speechley and Benson sands, which lie at considerably greater depths than the other sands, 100 pounds was considered a reasonabel abandonment pressure. Accordingly, the points of production for the last ten years which were in alignment, were extrapolated to these abandonment pressures for the purpose of estimating the recoverable gas reserves.

The gas reserves of "Individual Wells" located outside of sand pools were estimated by the construction of individual rock pressure-production decline graphs on which the rock pressures were plotted against the cumulated production of each well and the resultant graph extrapolated to the abandonment pressures mentioned above.

*Estimated Recoverable Gas Reserves of Present Drilled Wells as of December 31, 1938.*

By the method just described, the estimated recoverable gas reserves of the present drilled wells of the Hope Natural Gas Company as of December 31, 1938, were found to total 436,361,755 MCF. This figure is on a calculated production basis of measurement. Estimates of the recoverable gas reserves by sand-pools and individual locations are given in detailed summaries in Part A, Volume III of this exhibit.

*Estimated Recoverable Gas Reserves From Deeper Sands in Present Drilled Wells as of December 31, 1938.*

The Hope Natural Gas Company contemplates that deeper sands in 119 of the company's present drilled wells will be productive of gas and will yield additional reserves if these wells are deepened and the deeper sands therein exploited.

After a careful study was made of each of these wells, the gas reserves recoverable from the prospective deeper sand or sands in each well were estimated by multiplying the estimated present useful rock pressure of each deeper sand by the volume in MCF of gas produced per well per pound pressure-decline for the sand pool in which the deeper sand is located. The estimated present useful rock pressure of each deeper sand was based upon the present rock pressures of nearby wells producing from the same sand.

17

By the above described method, the total estimated gas reserves recoverable from deeper sands in these 119 present drilled wells was found to be 28,285,256 MCF. This volume is based upon a calculated production basis of measurement. The estimated recoverable gas reserves from deeper sands in each of these wells are tabulated in Part B of Volume III of this exhibit.

*Estimated Recoverable Gas Reserves From Additional Locations on Operated Acreage as of December 31, 1938.*

The Hope Natural Gas Company contemplates 78 additional well locations on certain of the company's operated acreage.

The procedure of estimating the recoverable gas reserves underlying these additional locations was similar to that used in estimating the reserves from deeper sands in present drilled wells. The estimated present useful rock pressure of the prospective sand underlying each location was multiplied by the volume in MCF of gas produced per well per pound pressure decline for the sand pool in which the well site is located to determine the estimated recoverable reserves. The present useful rock pressure of the prospective sand was based upon the present rock pressures of nearby wells producing from the same sand.

The total estimated recoverable gas reserves from these additional locations on operated acreage was found to be 20,962,230 MCF. This volume is on a calculated production basis of measurement. The list of leases on which the additional locations are contemplated and the estimated gas reserves recoverable from

each of these additional locations are given in Part C of Volume III of this exhibit.

*Estimated Recoverable Gas Reserves from Additional Locations on In Lieu of Drilling Acreage as of December 31, 1938.*

The Hope Natural Gas Company contemplates 23 additional well locations on certain of the company's leaseholds on which there were no wells but upon which the company was paying
18 royalties in lieu of drilling. The company contemplates drilling a well on each of these locations in order to recover fully the gas reserves which cannot be recovered from adjacent drilled wells.

The recoverable gas reserves underlying each of these additional locations on in lieu of drilling acreage were estimated in a manner similar to that employed in estimating the recoverable gas reserves from additional locations on operated acreage. The estimated present useful rock pressure of the prospective sand underlying each location was multiplied by the volume in MCF. of gas produced per well per pound pressure-decline for the sand pool in which the well site is located to arrive at the estimated recoverable reserves. The estimated present useful rock pressure of the prospective sand was based upon the rock pressures of nearby wells producing from the same sand.

The total gas reserves recoverable from the 23 well sites designated by the company as additional locations or in lieu of drilling leases was estimated to be 6,072,299 MCF. This volume is on a calculated production basis of measurement. The list of "in lieu of drilling leases" upon which it is contempated these additional locations will be made and the estimated gas reserves recoverable from each of the additional locations are given in Part D of Volume III of this exhibit.

*Past Production of the Company—1913 to 1938, Inclusive.*

As mentioned previously in this statement, the annual calculated production for all of the wells of the Hope Natural Gas Company was available from 1913 to 1938, inclusive, and was transcribed to well-data sheets for purposes of this exhibit. The annual production of all wells was totaled by "Sand Pools" and "Pool Areas" and "Individual Wells" for use in the reserve study.

The total annual volume of calculated production from all of the wells in each pool area has been so classified and summarized as to reflect for each of the years 1913 to 1938, inclusive, the portion of such production in each pool which was recovered from

the present drilled wells of the company, the portion recovered from the dead wells on active acreage, and the portion recovered from the dead wells on dead acreage. The annual production so classified is presented in Volume II of this exhibit. Those tables show that the total quantity of calculated production from all company wells during the years 1913 to 1938, inclusive, amounted to 1,129,600,832 MCF.

19 *Method of Estimating Calculated Production Prior to 1913.*

Since the calculated production for all wells of the Hope Natural Gas Company was not available until 1913, the calculated production prior to 1913 had to be estimated.

The method here employed for estimating production prior to 1913 used the decline in rock pressure experienced by the wells that had produced gas in the period prior to that date and the volume in MCF of gas produced per pound pressure-decline experienced by the same wells or contiguous wells after that date. The original rock pressures, where available from the company's records, were transcribed to data sheets. Where original rock pressures were not available or were questionable, they were estimated from the rock pressure histories of nearby company wells or obtained from other company records. In the case of purchased wells which had produced gas prior to the date of purchase, the recorded or estimated rock pressure as of the approximate date of purchase was used.

The volume in MCF of gas produced per well per pound pressure-decline for each sand pool for the period 1913 to 1921 was determined from the rock pressure-production decline graphs previously described. The volume in MCF of gas produced per well per pound pressure-decline was obtained by dividing the cumulative production for the selected interval of years (between 1913 and 1921) by the product of the average number of wells producing gas during that interval and the pounds of pressure decline for the sand pool during that interval. This volume in MCF per pound pressure-decline was then applied as a multiplier to the pounds of pressure-decline experienced by each of the wells which produced from the same sand or sands prior to 1913, to determine the production of gas prior to that date. Since this volume-pressure multiplier was determined upon the basis of calculated production, the estimated production prior to 1913 likewise is on a calculated production basis of measurement.

An illustration of the information used in estimating the calculated production prior to 1913 is presented in the sample work-

ing sheet which appears on the following page. It will be observed that the adopted volume in MCF of gas produced per well per pound decline in pressure for the interval of years after 1913 appears at the top of the sheet and is applied as a multiplier to the net pounds of (pressure) decline to obtain the estimated production given in the last column.

[Page 20 omitted.]

21 The estimated production prior to 1913 is given by geographical location in the summary contained in Volume II of this exhibit. The total calculated production prior to 1913 has been estimated as 403,797,000 MCF. This figure includes the volumes of gas produced by all wells owned by the company since 1899 through 1912.

Conversion of Calculated Production to Actual Production

All volumes expressed in this exhibit are based upon calculated production. It is recognized, however, that the calculated volumes of gas produced from individual wells do not represent the volumes that would have been recorded had they been metered. Therefore, to convert the volumes shown in the various summaries and parts of this report to volumes that are comparable to metered production, it is necessary to apply conversion factors or multipliers developed by engineers of the Federal Power Commission from a study of the company's past production. These conversion factors are given in the tabulation "Recapitulation of Estimated Recoverable Gas Reserves and Past Production," Volume II, page 4 of this exhibit.

Since the conversion factor for the 21-year period immediately prior to 1938 was found by Commission engineers to be consistently 0.70, it was reasonable to assume that this same factor was applicable to the future recoverable gas reserves. Accordingly, as a final step in the presentation of the results of this gas reserve study, the total volumes of recoverable gas reserves have been translated to actual volumes by the application of this 0.70 conversion factor.

22 Conclusion

The recoverable gas reserves from the present operated acreage of the Hope Natural Gas Company as of December 31, 1938, expressed as actual volumes in MCF, by the application of 0.70 conversion factor, are as follows:

| | Estimated recoverable gas reserves as of Dec. 31, 1938, in MCF |
|---|---|
| Present drilled wells | 305, 453, 229 |
| Deeper sands in present wells | 19, 799, 679 |
| Additional locations on operated acreage | 14, 673, 561 |
| Additional locations on in lieu of drilling acreage | 4, 250, 609 |
| Total | 344, 177, 078 |

Signed JOHN S. ROSS,
John S. Ross.

Date, February 3, 1941, at Washington, D. C.

[Pages 23 to 48 omitted.]

## EXHIBIT NO. 51-A.—ESTIMATED RECOVERABLE GAS RESERVES AND PAST PRODUCTION OF THE HOPE NATURAL GAS COMPANY AS OF DEC. 31, 1939, F. P. C. WITNESS ROSS

| | Calculated production (4 oz.+14.4 lbs.) | Conversion factor | Actual production (8 oz.+14.4 lbs.) |
|---|---|---|---|
| Production, 1939, in MCF: | | | |
| Present drilled wells | 23,443,355 | 0.70 | 16,410,348 |
| Dead wells on active acreage | 38,981 | .70 | 27,287 |
| Dead wells on dead acreage (in pools) | 131,067 | .70 | 91,747 |
| Dead wells on dead acreage (outside pools) | 24,068 | .70 | 16,848 |
| Total, 1939 | 23,637,471 | | 16,546,230 |
| Past production in MCF: | | | |
| Total, 1899-1938 (Exhibit No. 43A) | 1,533,397,832 | | 1,268,972,545 |
| Total, 1899-1939 | 1,557,035,303 | | 1,285,518,775 |
| Estimated recoverable gas reserves in MCF: | | | |
| Present drilled wells | 413,287,713 | .70 | 289,301,399 |
| Deeper sands in present wells | 28,241,537 | .70 | 19,769,076 |
| Additional locations on operated acreage | 20,289,460 | .70 | 14,202,622 |
| Additional locations on in lieu of drilling acreage | 6,072,299 | | 4,270,609 |
| Total | 467,891,009 | | 327,523,706 |
| Probable total recovery in MCF | 2,024,926,312 | | 1,613,042,481 |

1 **EXHIBIT NO. 65.—DETERMINATION OF COMPOSITE SERVICE LIVES OF THE HOPE NATURAL GAS COMPANY PROPERTY BY PRIMARY ACCOUNTS, F. P. C. WITNESS FRENCH**

## WITNESS' POSITION AND EXPERIENCE

Position: Engineer-Rate Investigator.

Education: High School, Ceredo, W. Va.; Lane Technical High School, Chicago, Illinois; Marshall College, Huntington, W. Va.; Ohio State University, Columbus, Ohio.

Experience:

1938 to date: Member of the staff of the Federal Power Commission, with title of Engineer-Rate Investigator. During this period have made numerous investigations and reports on natural gas utility properties. Have consulted with State Regulatory Commissions in the preparation of exhibits and testimony relating to natural gas properties, on depreciation and all other phases of rate-making.

1932 to 1938: Employed by the Railroad Commission of Texas as Chief Engineer of the Gas Utilities and Oil Pipe Line Division, in charge of all valuation and engineering reports and investigations relating to the operations of those companies in the State of Texas which were under the jurisdiction of that commission.

2 During this period valuations and reports were made on approximately 12,000 miles of gas production and transmission lines, 28,000 miles of oil pipe lines and 250 gas distribution systems. The total cost of these properties was in excess of one-half billion dollars. In the preparation of reports and exhibits on these properties it was necessary to determine depreciation rates on all classes of gas plant property. Approximately 7,000 bell-hole pipe inspections were made either personally or under my direction. From these inspections various data were listed in the determination of the extent and causes of underground corrosion of steel pipe and other factors leading to the ultimate retirement of pipe. Retirement studies of all classes of gas plant property were made from the records of all the companies investigated and the results analyzed.

When the Interstate Commerce Commission initiated its active regulation of interstate oil pipe line carriers during 1934 and 1935, I assisted that Commission's staff in setting up their method of inventory and inspection of oil pipe line carrier facilities, and accompanied Dr. Logan of the United States Bureau of Standards during the course of their inspection of oil pipe lines in the State of Texas.

During my employment as Chief Engineer of the Texas Railroad Commission, there were prepared, under my supervision, numerous engineering studies and reports on gas and oil properties, among which are listed the following major companies involved:

3 Natural Gas Production and Transmission Systems

United Gas Pipe Line Company.
Northern Texas Utilities Company.
West Texas Gas Company.
Lone Star Gas Company.
Public Service Corporation of Texas.
Rio Grande Valley Gas Company.
Tex-Mex Natural Gas Company.
Houston Gulf Gas Company.
El Paso Natural Gas Company.
Ankansas-Louisiana Gas Company.
City Gas Company.
Brazos River Gas Company.
M. & M. Pipe Line Company.
Southern Gas Utilities Company.
Texas Gas Utilities Company.
Producers Utilities Company.

Natural Gas Distribution Systems

San Antonio.
Ft. Worth.
El Paso.
Waco.
Community Natural Gas Co. (190 towns).
Miscellaneous small towns (60 towns).

Oil Pipe Line Carriers

Texas Pipe Line Company.
Atlantic Pipe Line Company.

Sinclair Prairie Pipe Line Company.
Humble Oil Company.
Texas Empire Pipe Line Company.
Sun Oil Company.
Gulf Pipe Line Company.
Shell Pipe Line Company.
Sinton Pipe Line Company.
Magnolia Pipe Line Company.
Barnsdall Pipe Line Company.
Numerous smaller properties.

On the above listed properties it was necessary to pre-
4 pare inventory and appraisals, and in a number of instances, prepare exhibits and testify thereon.

I also prepared engineering studies relating to the determination of service lives of the several classes of natural gas property, the causes of removal of gas plant from service; and the frequency of replacement of natural gas pipe lines from all causes.

During this period, engineering studies were prepared under my supervision, for the purpose of determining the cost of natural gas service, which included allocation studies necessary for the determination of the cost of service at "city gates" and to individual consumers.

It was also my responsibility to appear and testify a number of times on matters relating to proceedings before the Commission and appear as a witness for the Commission in the Appellate Courts of Texas in cases involving the determination of rate base, depreciation, allocation, and other phases of complete gas rate investigations.

Under my supervision, time studies were made in the field of actual labor performances, during the course of construc-
5 tion, on practically all major gas and oil pipe lines constructed in Texas over a five-year period beginning in 1933. This construction exceeded 1,000 miles of pipe lines of various sizes ranging from two to twenty inches in diameter.

In carrying out the duties and responsibilities of the engineering work of the division there were from six to twenty-five engineers employed under my supervision, the number varying with the amount of work in progress.

1927 to 1932: Employed by the City of Amarillo, Texas, as Assistant City Engineer and Water Superintendent. During this period I was in charge of all design, specifications, and estimates on municipal projects constructed by the City. Construction work

completed during this period included sanitary sewerage system, storm sewers, several railroad underpasses, sewage disposal plant, several hundred miles of water mains, and other municipal improvements. I designed and prepared specifications on a proposed $1,000,000.00 municipal natural gas plant for the City of Amarillo, part of which was constructed and placed in operation before leaving the service of the City. I assisted Black
6 and Veach, Consulting Engineers, in the preparation of a valuation of the properties of the Amarillo Gas Company. During this period I was also employed by the United States Bureau of Mines in connection with the construction of a helium extraction plant near Amarillo, Texas.

1925 to 1927: Employed by the Pacific Coast Steel Company in Seattle, Washington, as designer, detailer, and sales engineer of reinforced concrete structures.

1923 to 1925: Employed by the Consolidation Coal Company at Van Lear, Kentucky, as office engineer doing general engineering work.

1923: Employed by the American Rolling Mills Company in their steel plant located at Ashland, Kentucky, as detailer and mechanical draftsman.

Prior to 1923: Employed on various engineering work between school terms, and with the United States Army in France for one and a half years, during 1918 and 1919.

I am a member of the National Society of Professional Engineers, American Society of Civil Engineers, and a Licensed Professional Engineer in the State of Texas.

7 WRITTEN EXPLANATORY STATEMENT

INTRODUCTION

This exhibit sets out in detail by primary accounts the depreciation, depletion, or amortization method used and its application to the properties of the Hope Natural Gas Company.

Certain terms used herein are defined as follows:

"Depreciation," as applied to depreciable gas plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service, from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy,

obsolescence, changes in the art, changes in demand and requirements of public authorities and, in the case of natural gas companies, the exhaustion of natural resources.

"Depletion," as applied to natural gas producing land and land rights, means the loss in service value incurred in connection with the exhaustion of the natural resource in the course of service.

"Service Life" is the period during which a particular unit of property is used or performs a useful function in the rendering of service by the utility; likewise the period of service between the installation of a unit of property and its retirement from service.

8 "Service Capacity" means the total output of utility plant realizable during its service life, measured either in number of years of service, number of work operations performed, or other production factor, as appropriate.

"Service Value" means the difference between original cost and the net salvage value of gas plant.

"Salvage Value" means the amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale, or, if retained, the amount at which the material recoverable is chargeable to Account 131, Materials and Supplies, or other appropriate account.

"Cost of Removal" means the cost of demolishing, dismantling, tearing down, or otherwise removing gas plant, including the cost of transportation and handling incidental thereto.

"Net Salvage Value" means the salvage value of property retired less the cost of removal.

"Property Retired" as applied to gas plant, means property which has been removed, sold, abandoned, destroyed, or which for any cause has been withdrawn from gas service.

"Retirement Units" means those items of gas plant which, when retired, with or without replacements, are accounted for by crediting the book cost thereof to the gas plant account in which included.

"Life Cycle" is the period of service life comprehended in the period of usefulness of a unit of property in a given position.

9 The service life of a unit may be comprised of one or more life cycles; these need not be consecutive, but may never overlap. When a unit of property has a second cycle of life, it is second-hand or reused.

"Average Service Life" is the average of a substantial number of individual service lives of similar units of property.

"Composite Service Life" is the weighted average service life of two or more groups of property; likewise that period of service life within which a uniform depreciation or depletion accrual will amount to the sum of the service values of the individual units of property in one or more primary plant accounts or principal plant divisions to which the composite rate is applied.

"Unit of Production" is one unit, on a uniform basis of measurement, of the produced or delivered principal service or commodity which the property is devoted to produce or deliver.

"Production Method" is a method of depreciation or depletion computation in which the loss in service value of property is spread over its service life uniformly in proportion to its units of commodity produced or service delivered without regard to time.

"Straight-Line Method" is the depreciation or depletion plan under which the service value of property is charged to operation expense or other accounts in equal, as nearly as may be, periodic amounts throughout its service life. Thus, under this method, the annual depreciation charge is obtained by dividing the estimated service value by the number of years of estimated service life.

10 Scope of Exhibit

This exhibit describes the methods which have been used and the studies that were made in connection with the determination of average service lives and composite service lives applied to the gas plant of the Hope Natural Gas Company. It also describes the method employed to determine the necessary annual rates for depletion.

General Statement

The gas plant in service of the Hope Natural Gas Company (exclusive of distribution plant and properties used to transport coke oven gas) after having been grouped in accordance with the functional divisions of operations, consisted of several major classes of property as at December 31, 1938. These classes are listed in the following tabulation in accordance with the depletion and depreciation method which has been applied. (While a distinction is sometimes made between depletion and depreciation for the purposes of the following discussion, the word "depreciation" is intended to include "depletion" where appropriate.)

*Production Method.*

Natural Gas Producing Lands and Leaseholds.
Field Line Construction and Rights-of-way.
Gas Well Construction.

*Straight-Line Method.*

Structures (Production, Transmission, and General).
Measuring and Regulating Station Equipment (Production and Transmission).
Gas Well Equipment.
11 Field Line Equipment.
Main Transmission Line Construction, Equipment and Rights-of-way.
Compressor Station Equipment.
Communication Equipment.
Other Equipment (Production, Transmission, and General.

*Clearing Accounts.*

Drilling and Cleaning Equipment.
Transportation Equipment.

It is to be understood in the subsequent discussions that the items above designated are intended to reflect the costs of all materials, installation, and all other expenditures that would be lost by retirement of the property.

Comprehensive engineering studies and detailed field inspections have been made of all classes of property in order that a rational application of the basic principals of depreciation might be applied to the depreciable property of the Hope Natural Gas Company as of December 31, 1938.

The property of the Hope Natural Gas Company consists of several types of physical property having various mortality characteristics. In the determination of the proper service lives for each group of property, consideration has been given to not only the type of property, but also to the character of service
12 that these units are called upon to render and the service conditions under which they operate and render service.

The properties that are subject to removal or retirement due to the exhaustion of the supply of gas, which they were designed and constructed to produce or gather, have been grouped in the several producing areas, designated by Federal Power Commission geologists, and was depreciated on a unit of production basis. The annual rates of accruals have then been determined upon the basis

of units of production ratably in proportion to the annual production of gas with the rate in each year determined to be the ratio of the annual production to the remaining recoverable gas reserves.

In a few instances property in more than one of the present primary property accounts has been grouped and a composite rate determined for the combined property for which accurate experience data were available.

During the course of the determination of the average service lives of this property, numerous and detailed inspections were made of all classes of property in the system. This includes an inspection of all visible property subject to examination such as structures and compressing station equipment and sample inspections at many points of the underground pipe and buried property comprising the pipeline system. I also made analyses to determine the property retirement experience of the company covering property whose service life had been terminated and the depreciation realized and a review of the maintenance policy and operating practices over the forty-year history of the company.

In addition, a study was made of the service age of the principal identifiable units of the company's property. (Service age is the period of time between the date when property is first placed in service and the date of the investigation.) Careful consideration and effect was also given to all of the relevant facts determinable concerning the probable future life expectancy of the principal physical units of property. In addition to the extensive inspection and study of the company's property, there was available during the process of determining the average service lives for all classes of this property, considerable relevant data from the following sources:

1. Interstate Commerce Commission, Bureau of Valuation determinations of service lives for oil pipeline properties in the United States, including lives determined for systems located in the same general territory.

2. Bureau of Internal Revenue determinations of service lives for various classes of gas corporation property.

3. Conferences on the service lives of gas plant equipment with manufacturers and users of such equipment.

4. A study of the service lives adopted by various Commissions and courts in proceedings involving the determination of service lives for all types of utility property, including natural gas companies;

5. Numerous public utility service-life studies, including natural gas companies, prepared by prominent engineers; and

14 6. Numerous service-life studies of natural gas companies made under my direction while Chief Engineer of the Texas Railroad Commission.

An examination of the voluminous and comprehensive working papers underlying the determinations of average and composite service lives in this exhibit will indicate the careful consideration that has been given to the many factors involved in these determinations.

The summary attached to this written explanatory statement sets forth, by primary accounts and groups of accounts, the composite service lives and the annual rates of depreciation which I have determined to be reasonable and applicable to the gas plant of the Hope Natural Gas Company. Each primary account or group of accounts is discussed below in the same order as the accounts are listed on the attached statement of composite service lives.

SERVICE LIFE DETERMINATION BY ACCOUNTS

*Natural Gas Producing Lands (330–1).*

This account includes lands owned in fee on which are located producing gas wells. Since these lands were purchased primarily for the production of gas and would be an entire loss to the company at the end of their production period, the original investment was grouped by producing areas and depletion computed on a unit of production basis. A study made to determine what portion of its cost the company would be expected to recover

15 through the sale at the end of the lands' useful gas production life, and the amount was found to be negligible.

*Leaseholds (330–2).*

Leases included in this account have been segregated, by Federal Power Commission geologists, into (a) operated acreage held for the production of gas, and (b) unoperated acreage. All leases under the classification of operated acreage were segregated further into their respective gas producing areas and depletion has been provided on the basis of the units of production from each area.

*Other Production System Land and Land Rights (330–5).*

Property in this account consists of tracts of land owned in fee upon which it appears the company can realize at the end of

its useful life an amount approximating in the aggregate the original cost. This land has therefore been considered nondepreciable and no allowance has been provided for losses attributable to its use in gas service.

*Field Line Rights-of-way and Field Line Construction (330-4) (333-1).*

Included in this account grouping are the rights-of-way for all of the field lines, together with the labor and construction costs for field lines, both "field trunk" and "field gathering." No physical property is involved in these accounts,
16 as the expenditures relate to installation costs and the securing of easements and rights-of-way. Since this property will have no further service value after the exhaustion of the available gas supply, and unlike pipe and other materials, cannot be used again at other locations, it has been determined that it is proper to measure the service capacity of this property by the life of the supply and provide for its depreciation upon the basis of the use of the property measured by the production of gas. This property has therefore been depreciated on a production basis. However since this property had more than one use, it has been segregated into three groups as follows:

(1) Field Trunk and Gathering Lines.
(2) Local Marketing Lines.
(3) Lines receiving gas purchased under contracts.

The property included in group (1) was further segregated into the several designated gas production areas and depreciated upon a unit of production basis. Property included in groups (2) and (3) was depreciated on a unit of production basis, using over-all production as the base.

Local Marketing lines are defined as production system lines now devoted principally to the serving of towns and villages in West Virginia. A study made to determine whether such lines would be abandoned or removed from their present locations at the time of the exhaustion of the gas supply from the
17 Company's own production indicated that these local consumers would probably be supplied with gas service through pipe-lines laid in a more direct route to the main transmission lines. Since these towns and communities are scattered over the entire system of the Company, it was decided that the most accurate method of determining the service capacity and providing for the depreciation of the properties in this grouping would be on an over-all production basis.

Since data relating to the remaining value of gas reserves available to the Company from the purchase gas contracts were not available, it has been determined that the most equitable depreciation treatment for these lines would be similar to that for local marketing lines and such method has been adopted.

*Production System Structures (331–2) (331–3).*

Included in this account grouping are Field Measuring and Regulating Station Structures (331–2) and Other Production System Structures (331–3). Included under Field Measuring and Regulating Station Structures are approximately 590 regulator and meter houses. These structures are wood frame, metal sides and metal roof in construction. There are also included 1,480 free consumers' boxes. These structures are used to house equipment for the measurement of purchased gas. Most of these structures are small and portable.

Other Production System Structures include such struc-
18 tures as warehouses, district offices, pipe yards, machine shops, garages and miscellaneous smaller structures. These structures are located in the various operating districts and are for the most part of wood frame construction with metal sides and roof. There are several hundred of these structures, all of which I inspected in the field recording appropriate data, such as location, condition of maintenance, type of construction, type of foundation and age. A study was made of the Company's retirement experience on structures during the forty-year history of the Company. After giving consideration to all relevant depreciation factors causing the ultimate retirement of such property, both functional and physical, a composite service life of 24 years was determined to be reasonable and applicable to the Company's Production System Structures.

*Gas Well Construction (332–1).*

Well construction expenditures were grouped into designated gas producing areas and depreciated on a unit of production basis. There is no material included in this account for these well construction expenditures, such as labor and indirect expenses, and therefore they have no value after the exhaustion of the related gas supply.

*Gas Well Equipment (332-2).*

This account includes casing and tubing and other well equipment such as closing-in equipment, packers, pumping equipment and storage facilities.

From the records of the company a study was made of all natural gas wells both drilled and acquired since the beginning of operations. This study was segregated into two parts, wells presently active and wells which have been abandoned. From this study the average age of the present active wells and the average age of wells abandoned was determined.

When pipe casing, tubing, or other equipment, not bearing a serial number or other identifying mark is moved from one location and is returned to the ware house, it loses its identity. It therefore is impossible in the case of this company to determine the actual age of any specific section of such pipe, casing, or tubing which is reused and is in other than its first cycle of use.

It was determined, after making the foregoing studies and a consideration of all relevant facts, that casing and tubing would be used in more than one gas well during their physical service lives.

It was found that the Company does not recover all of the materials in the well at the time of its abandonment, and it was necessary to consider this fact in the determination of service life of such property. Studies were made of the past retirement experience of the Company, and data were tabulated showing the percent of materials not recoverable from wells at the time of abandonment. Other studies were made from the records of the Company to ascertain the average cost to abandon gas wells in accordance with the requirements of the laws of West Virginia. Data were secured on the average cost of abandonment of a gas well from other gas utility companies operating in the same area to check the accuracy of the average costs obtained from the study based on the current experience of the Hope Company.

During the spring and summer of 1939, engineers for the Federal Power Commission made numerous inspections in the field of casing and tubing as they were recovered from wells abandoned during that period. Much of this recovered casing and tubing had been previously used before being placed in these wells, which made it impossible to determine with any degree of exactness the age of the pipe in service, and therefore it was not

practicable to use this inspection data to establish the service life of casing and tubing.

In the absence of reliable data pertaining to the service lives of gas well casing and tubing, it has been necessary to utilize the service lives developed in connection with the transmission and field line pipe of comparable wall thicknesses, adjusted to give effect to losses other than physical.

In addition, a study was made of the Hope Company's experience in the retirement of all gas well equipment during the forty-year history of the Company.

After giving consideration to all relevant factors, it was determined that a service life of 40 years would be reasonable for gas well equipment.

21 *Field Line Material (333–1), Field Measuring and Regulating Station Equipment (333–2), Other Production System Equipment (337).*

Field Line Material (333–1) includes pipe and material in all field trunk and gathering pipe lines.

The principal use of these lines is for the collecting and gathering of gas from the well mouth to point of entry into the transmission system.

During the spring and summer of 1939, engineers for the Federal Power Commission made numerous individual inspections of pipe in these lines in the presence of engineers employed by the Company, at locations selected by the Company's representatives. There were 253 locations where inspections were made on field trunk and field gathering pipe lines.

From a study of the records of the Company, it was determined that the greater portion of the pipe included in this account had completed its first cycle of use and was reused or second hand pipe when it was installed at its present location. It was further found from an examination of the Company's records that it was impossible to determine with any degree of accuracy the age of this used field line pipe for it had lost its identity upon entering the warehouse after the first cycle of use, and no record was available from which the information could be secured. However, it was found that in some instances, where inspections were made that the pipe was new when installed. The data secured from the inspec-
22 tions of that portion of this pipe which was found to be in its first cycle of use, together with similar data on pipe inspected on transmission lines of known ages, were used in the study of service life.

After consideration of the available data on all pipe, it was determined to use the same service life for field trunk and field gathering pipe as was used for transmission pipe of comparable wall thickness. In so doing it was necessary of course to make adjustments for losses that would occur due to the shifting of the field pipe from one location to another.

The average service life that has been determined for this pipe gave consideration to the portion of the life of the pipe and equipment which had been consumed in service prior to its acquisition by the Company. A more complete discussion of the data collected and the methods used in the determination of service lives for all pipe is presented in connection with the determination of service lives of the main transmission line material, Account (353).

A study was made of the Company's retirement experience of field trunk and field gathering pipe lines, and information secured from this study was also given due consideration in the determination of service lives for this pipe.

Field Measuring and Regulating Station Equipment (333.2) includes equipment such as orifice meters, positive meters and gauges used principally to measure gas purchased by the Company, free gas to lessors and gas used in the Company's operations, and is located throughout the entire system. Field inspections were made of representative parts of this property, and a study was made of the retirement experience of the Company relative to the class of equipment included in this account.

23

Other Production System Equipment (337), includes items such as small gas engines, pumps, tools, etc., located at various points in the operating districts. A study was made of the retirement experience of the company relative to the class of property included in this account.

After giving consideration to all factors, both functional and physical, involved in the determination of the service life of this property, it was determined that a composite service life of 45 years would be reasonable for property grouped in these three accounts.

*Drilling and Cleaning Equipment (334).*

Investigation by the Commission's accounting examiners has revealed that depreciation of drilling and cleaning equipment is accounted for on the books of the Company through a clearing account, and is charged to gas plant or the operating expense accounts as appropriate. After considering the Company's expe-

rience in the retirement of drilling and cleaning equipment, it was found unnecessary to adjust the rates used by the Company for this account.

24 *Transmission System Land (351–12).*

This account includes tracts of land owned in fee and used principally as compressor station sites. No provision has been made for depreciation of these lands, for they are considered non-depreciable for it appears that there will be no losses in the aggregate attributable to their use in gas service.

*Transmission System Rights-of-way (351–23) and Transmission Line Construction (353).*

Transmission System Rights-of-way (351–23) includes the cost of easements and rights-of-way for all of the main transmission lines. Transmission Line Construction (353) represents the labor and indirect costs of construction of all transmission lines. The methods used in arriving at the service life of these accounts will be discussed later in connection with the determination of the service life of Main Transmission Line Material. These two accounts were kept separate in order to utilize the Company's recorded experience in the retirement of this classification of property. The average service life for the combined property in these two accounts has been determined to be the same as that of Transmission pipe line material, namely 34 years.

TRANSMISSION SYSTEM STRUCTURES

*Compressor Station Structures (352–2), Transmission System Measuring and Regulating Station Structures (352–3), Other Transmission System Structures (352–4).*

Compressor Station Structures (352–2) includes struc-
25 tures and improvements located at the several compressor stations. A field inspection was made by engineers of the Federal Power Commission of each of the forty-seven compressor stations of the Company. At each station data, such as the location, type of construction, size, condition of maintenance, kind of foundations and age, etc., were recorded for each of the many structures at each station. A careful study was made of the experience of the Company relative to the retirement of compressor station structures to ascertain the actual history of the Company in this matter. Further, a study was made from the records of the company to secure data relating to the cost of

abandoning compressor station structures and the percent of salvageable materials that had been recovered upon retirement.

It was found that the service life of the structures located at several compressor stations of the Company will be determined by the exhaustion of the available supply of gas which the station was constructed to compress. Consideration has been given in the determination of the service life of these structures to give proper effect to this known condition.

Transmission System Measuring and Regulating Station Structures (352–3), include structures such as measuring stations located at wholesale delivery points such as Clarington, Round Bottom, Bates and Wade, etc. All of these structures were inspected in the field and data were tabulated similar to that for compressor station structures. Studies were made of the
26 Company's retirement experience relating to structures under this classification.

Other Transmission System Structures (352–4) includes structures used by the transmission line operating personnel at various points on the transmission system. These structures consist of warehouses, pipe sheds, and pressure control houses, etc. These structures were also inspected in the field and appropriate notes made and data tabulated. A study was also made of retirements occurring to property of this class included under this account to develop the experience of the Company with similar property.

After giving weight to all relevant factors, both functional and physical, contributing to the ultimate retirement of this class of property, it was determined that a composite service life of 40 years is reasonable, proper, and applicable to the transmission system structures in these three accounts.

*Transmission Line Material (353), Transmission System Measuring and Regulating Station Equipment (354–3), Other Transmission System Equipment (354–4).*

Transmission Line material (353) includes pipe and fittings on all transmission lines. During the spring and summer of the year 1939, engineers for the Federal Power Commission made careful inspections of pipe in the field at approximately 297 locations on transmission pipelines and 253 locations on field pipelines. The locations of the inspections were selected by
27 Company engineers who were present at the time of these inspections.

The Federal Power Commission engineers made inspections and recorded data independent of that of the representatives of the

Company. Each inspection "bell-hole" was dug approximately six feet square with sufficient depth to completely uncover the pipe and permit an inspection of the bottom of the pipe as well as its sides and top. Data, such as the depth of the external pitting of the pipe (never less than ten pits on each 18-inch inspected section), location of pits, outside diameter of pipe, general characteristics of corrosion, kind of soil and topography were recorded. There was added in addition, information from the records of the company indicating the normal wall thickness of the pipe and its age in the position of installation. At practically all of the inspection locations samples were taken of the soil at points near the bottom and top of the pipe and also at the ground level. Corrosivity tests were made of representative samples of these soils, in Washington, D. C., under the direction of the United States Bureau of Standards and the results were correlated with the pit data recorded in the field by Commission engineers.

It is the general consensus of opinion that the average of the deepest pits that will be found in pipe will increase as the inspected area is increased. The method used by the Company engineers to determine the pit-depth area relationship, for the pipe of the Company, was found to be similar to that which
28 has been derived by the United States Buerau of Standards during the course of their study relating to the effect of underground corrosion of pipe. Using this same method, calculations have been made by Commission engineers to compute the average of the deepest pits in areas greater than those inspected in the field during the course of this investigation.

Upon completing the field inspections, the data secured were tabulated and analyzed and those inspections which appeared to have been made of pipe of an unknown age were omitted from the study of pitting rates as related to the age of the pipe. All of the remainder of the tabulated inspection data were analyzed and made a part of these studies. It was found that there has been a definite retardation in the rate of pitting of pipe, left undisturbed in the ground, with the passage of time. In the course of the studies analyzing this inspection data, calculations were made using several methods, and the results were plotted graphically to obtain the variation in service life of pipe using several terminal service conditions. All of these studies were used as guides in the determination of average service lives of pipe.

Members of the staff of the Underground Soil Corrosion Section of the United States Bureau of Standards, familiar with soil corrosion, were consulted to secure a further check on the Commission engineers' methods of analysis of available corrosion data.

In addition, a study was made from the records of the Company of the pipe retirements that have been experienced by the Company during the entire history of its operations, and this information was also given consideration in the final determination of the average service lives of pipe.

One of the determinations resulting from the studies and investigations is that, with conditions comparable, the wall thickness of pipe is one of the principal factors controlling its service life. Consequently the service lives which have been determined give proper consideration and effect to the wall thickness of the pipe. The average service lives determined to be reasonable and proper ranged from 35 to 75 years.

Transmission System Measuring and Regulating Station Equipment (354–3), includes meters, regulators, pipe and fittings located principally in the Clarington, Round Bottom, Bates and Wade measuring stations of the Company. All of this equipment was inspected in the field and appropriate engineering data recorded. Likewise, a study was made of the retirement experience of the Company throughout its history for this class of equipment.

Other Transmission System Equipment (354–4) includes items of property such as pumps, tanks, tools, and miscellaneous equipment located principally in transmission line warehouses. A study was made of the Company's retirement experience for this class of equipment.

After an exhaustive study and careful consideration of all relevant facts involved in the determination of the service lives of this property, it has been determined that a composite service life of 64 years would be reasonable and proper for the classes of property combined in these three accounts.

*Compressor Station Equipment (354–2).*

This account includes equipment, such as gas engines, compressors, pumps, motors, pipe, and fittings, located in the forty-seven compressor stations owned by the Hope Natural Gas Company. Detailed inspections were made in the field by engineers of the Federal Power Commission of all of the compressor station equipment and appropriate data such as type, size, kind, class, and manufacture of the equipment and its age, condition of maintenance, use, etc., were recorded. The operating record was compiled for each

of the nearly 200 compressing units in the system for each day of the calendar years 1934 to 1939 inclusive. This record contained for each unit the engine-hours operated, hours-down for repairs, volume of gas pumped in MCF, the suction pressures and discharge pressures, which provided a large volume of statistical data relating to the operation of this property. Data were also tabulated showing the major repairs and alterations of gas engines and compressors during this period, and in some cases prior years. The cost of maintenance of each station was also studied for a period of nearly 20 years where it had been in existence for that time, and for the complete period of its existence where it was of lesser age.

31 Gas compressor engines and their associated equipment can not be used economically unless they possess a high degree of performance in comparison with their capacity when new. Thus, when the time comes for such units to be retired, their service life is terminated and they are retired at net salvage value, even though the physical condition would enable them to continue to render service.

It has been found that equipment located at several of the compressor stations will not serve their total potential physical service lives at their present locations for the reason that the exhaustion of the gas supply in those related local areas which provide the supply of gas pumped by the station will terminate the service life of the components of material, labor, and indirect costs of the equipment for such locations. The engines, compressors, and other recoverable compressor station material may likely be transferred to another location and enter another cycle of use to complete its service life. Appropriate adjustments were made in the average service lives indicating the occurrence of this known functional condition to give effect to these causes of depreciation. A study was made of the retirement experiene of the Company during its forty-year history. Several major manufacturers of gas engines and gas compressors were consulted and data relating to service lives of such equipment was discussed to secure an additional check upon the proper average service lives.

32 After giving consideration to all the factors entering into the ultimate retirement of this class of property, both functional and physical and the factors involved in the determination of service lives of this class of property, it was determined that the compressor station equipment of this Company would have a composite service life of 39 years.

*General Land And Land Rights (370).*

This account includes tracts of land on which are located the general structures of the Company, such as offices, warehouses, machine shops and garages. No provision has been made for depreciation of these lands, for it appears that there will be no loss in the aggregate attributable to their use in gas service.

*General Structures And Improvements (371).*

Included in this account are the general office buildings, warehouses, machine shops and garages of the Company. A field inspection was made of all of this property and appropriate data were recorded for each structure. A study of the retirement experience of the Company for this class of property revealed that to date few retirements had been made. It was further found there were two distinct classes of structures in this account, one class of structure being brick or fire-resisting and the other class being structures of less durable materials. This fact made it necessary to determine the average service lives of each class separately.

After consideration was given to all factors involved in the determination of the service life of this property, it was
33 determined that 50 years would be the proper service life for the general office building and general garage, and that 35 years would be proper for all other less durable structures, with the composite service life of all of these structures and improvements being 46 years.

*Furniture and Fixtures (372).*

This account includes all of the furniture and fixtures of the Company located in its general offices. A study was made of Company experience to give consideration to retirement losses on this class of property.

After a consideration of all relevant factors involved in the determination of the service life of this property, it was determined that a service life of 25 years would be reasonable and proper for office furniture and fixtures.

OTHER GENERAL EQUIPMENT

*Stores Equipment (374), Shop Equipment (375), Laboratory Equipment (376), Tools and Work Equipment (377), Miscellaneous Equipment (379).*

Stores Equipment (374), includes items of property such as benches, racks, bins, platforms, etc.

Shop Equipment (375), includes items of property such as drill presses, power saws, lathes, grinding machines, etc.

Laboratory Equipment (376), includes property used for testing gas, gas density apparatus, etc.

34 Tools and Work Equipment (377), includes items of property such as transits, levels, and other surveying instruments.

Miscellaneous Equipment (379), includes minor items of property such as time clocks, carbon monoxide detectors, etc.

Studies were made of the retirement experience of the Company on these classes of property, and after giving consideration to all factors it was determined that a composite service life of 27 years would be proper.

*Communication Equipment (378).*

Communication Equipment includes all general telephone and telegraph equipment in the communication system of the Company. There was no reliable mortality data available for this class of equipment from the property records of the Company, as the cost of practically all replacements had been charged currently as incurred to the maintenance expense account, and the true retirement losses were not reflected in the Company's property records.

Field inspections were made of this property by Commission engineers and appropriate data as to the type, kind, size and character of the construction were recorded.

After a consideration of all available relevant information and factors involved in the determination of the service life of this property, an average service life of 26 years was found to be reasonable and proper for Communication Equipment.

35 *Transportation Equipment (373).*

Transportation Equipment includes automobiles, trucks and garage equipment of the Company. The investigations of the Commission's accounting examiners reveals that the depreciation for this property is accounted for by the Company through a clearing account, and is charged to gas plant or the appropriate operating expense account as the equipment is used. After considering the Company's experience in the retirement of Transportation Equipment and the rates it uses, it is determined to be unnecessary to revise the annual depreciation rate used by the Company.

*Summary by methods*

| Classification | Adjusted original cost 12-31-38 | Composite service life (years) | Annual straight line rate (percent) |
|---|---|---|---|
| Straight line method | $40,229,028.04 | 46.72 | 2.14 |
| Production method | 9,959,683.46 | | |
| Land and land rights | 280,901.94 | Non-Depreciable. | |
| Drilling and cleaning equipment, and transportation equipment | 728,007.20 | Clearing Account. | |
| Total | 51,207,630.64 | | |

Signed FRANK S. FRENCH,
Frank S. French,
*Engineer—Rate Investigator.*

Date, March 14, 1941, Washington, D. C.

36 *Statement of Composite Service Lives Determined for Gas Plant of Hope Natural Gas Company*

[Exclusive of Distribution Plant and Property Used to Transport Coke Oven Gas]

| Account number and title | Adjusted book cost 12-31-38 | Service life (years) | Annual straight line rate percent |
|---|---|---|---|
| PRODUCTION SYSTEM | | | |
| 330-1 Producing lands | $3,319.84 | Production method. | |
| 330-2 Leaseholds | 1,599,004.86 | Production method. | |
| 330-5 Land and land rights | 21,008.52 | Nondepreciable. | |
| Field line rights-of-way and field line labor: | | | |
| 330-4 Rights-of-way | 645,391.47 | | |
| 333-1 Field line labor | 3,622,489.58 | | |
| Total | 4,267,881.05 | Production method. | |
| Production system structures: | | | |
| 331-2 Field measuring and regulating station structures | 21,138.92 | | |
| 331-3 Other production system structures | 191,188.81 | | |
| Total | 212,327.73 | 24 | 4.17 |
| 332-1 Gas well construction | 4,089,477.71 | Production method. | |
| 332-2 Gas well equipment | 7,610,509.75 | 40 | 2.50 |
| Field line material and field measuring and regulating station equipment: | | | |
| 333-1 Field line equipment | 7,674,251.82 | | |
| 333-2 Field measuring and regulating station equipment | 184,285.03 | | |
| 337 Other production system equipment | 75,532.21 | | |
| Total | 7,934,109.06 | 45 | 2.22 |
| 334 Drilling and cleaning equipment | 595,692.71 | Clearing account. | |

*Statement of Composite Service Lives Determined for Gas Plant of Hope Natural Gas Company*—Continued

[Exclusive of Distribution Plant and Property Used to Transport Coke Oven Gas]

| Account number and title | Adjusted book cost 12-31-38 | Service life (years) | Annual straight line rate percent |
|---|---|---|---|
| 37 TRANSMISSION PLANT | | | |
| 351-12 Land | 162,912.21 | Nondepreciable. | |
| Transmission rights-of-way and transmission line labor: | | | |
| 351-23 Rights-of-way | 391,242.69 | | |
| 353 Main line labor | 4,705,495.99 | | |
| Total | 5,096,738.68 | 64 | 1.56 |
| Transmission system structures: | | | |
| 352-2 Compressor station structures | 1,441,882.38 | | |
| 352-3 Transmission system measuring and regulating station structures | 8,207.21 | | |
| 352-4 Other transmission system structures | 6,775.69 | | |
| Total | 1,456,865.28 | 40 | 2.50 |
| Transmission line material and measuring and regulating station equipment: | | | |
| 353 Main line material | 9,426,578.73 | | |
| 354-3 Transmission system measuring and regulating station equipment | 17,615.91 | | |
| 354-4 Other transmission system equipment | 21,015.55 | | |
| Total | 9,465,210.19 | 64 | 1.56 |
| Compressor station equipment, 354-2 Compressor station equipment | 7,683,671.99 | 39 | 2.56 |
| 38 GENERAL PLANT | | | |
| 370 Land and land rights | 96,981.21 | Nondepreciable. | |
| General structures and improvements: | | | |
| 371 Office and garage | 174,907.46 | | |
| 371 Other structures | 50,980.32 | | |
| Total | 225,887.78 | 46 | 2.17 |
| 372 Furnitures and fixtures | 178,683.34 | 25 | 4.00 |
| Other equipment: | | | |
| 374 Stores equipment | 5,106.76 | | |
| 375 Shop equipment | 104,185.17 | | |
| 376 Laboratory equipment | 1,003.40 | | |
| 377 Tools and work equipment | 4,545.33 | | |
| 379 Miscellaneous equipment | 1,147.84 | | |
| Total | 115,988.50 | 28 | 3.57 |
| 378 Communication equipment | 248,975.74 | 26 | 3.85 |
| Transportation equipment: 373 Autos and trucks | 142,314.49 | Clearing account. | |
| Total | 51,207,620.64 | | |

1 **EXHIBIT NO. 61.—DEPRECIATION AND DEPLETION OF GAS PLANT AS AT DECEMBER 31, 1938, F. P. C. WITNESSES SMITH AND DUNN**

WRITTEN STATEMENT

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices, or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Natural Gas Company has been made, and, as a result, this report on the annual and accrued depreciation and depletion, as related to the original cost of the gas plant of the company, is submitted.

*Purpose and Scope of this Study.*

The purpose of this study is to determine the proper annual operating expense for depreciation and depletion and the proper amount of accrued depreciation and depletion as of December 31, 1938.

This study covers the period 1898 to 1938, inclusive, which is the entire corporate existence of the company to this date. It includes the original cost of plant accounts and additions, retirements, and adjustments thereto; property acquisitions and reserves acquired thereby; the losses from property retired and sundry matters affecting depreciation accounting.

Plant costs which are subject to loss in service value from causes described in the definition of depreciation, item 14, in the Uniform System of Accounts, have been depreciated at the
2 rates determined from service life estimates determined by the Bureau of Engineering. Plant costs, which are subject to loss in service value primarily as a result of exhaustion of natural gas resources, are depleted at rates derived from the annual production and natural gas reserves as determined by the Bureau of Engineering.

The depreciation and depletion expense is computed, and shown in the exhibit, by years, in order to give immediate effect to plant changes and retirement losses. All plant costs and retirement losses have been considered in this exhibit.



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*Depreciation Accounting as Practiced by Hope Natural Gas Company.*

Throughout its existence, the Company has recorded in its accounts depreciation expense and the accumulated reserves. As shown in Schedule No. 6, the accrued reserves amounted to $40,759,450.48 as at December 31, 1938. In order to discuss briefly the depreciation accounting, the following tabulations are submitted:

| | | |
|---|---|---|
| Balance in reserves as of Dec. 31, 1938 | | $40,759,450.48 |
| Less reserves for: | | |
| Operated acreage | $489,034.48 | |
| Unoperated acreage | 231,299.52 | |
| Cost of abandoning | 3,001.58 | |
| Contracts for gas | 813.44 | |
| Surplus property available for sale | 80,456.25 | |
| Appreciation—Clarksburg Lights & Heat Company | 45,431.90 | |
| | | 850,037.17 |
| Reserve for depreciation | | 39,909,413.31 |

3 The components of this reserve are summarized as follows:

| | |
|---|---|
| Provisions | $45,425,185.45 |
| Reserves acquired | 2,164,107.45 |
| Total credits | 47,589,292.90 |
| Charges | 7,679,879.59 |
| Balance, Dec. 31, 1938 | 39,909,413.31 |

*Reserve Provisions.*

The provisions have been computed at widely varying rates and on various classifications of property. In general the provisions have been far in excess of requirements as proved by the large reserve balance in relation to plant accounts and the fact that the company has made two retroactive adjustments of depreciation expense, resulting in large credits to the Surplus Account. The first of these adjustments was recorded on Voucher D 136, 1908, in the amount of $1,651,600.82. The second adjustment was recorded, pursuant to an authorization granted by the West Virginia Public Service Commission dated December 18, 1934 in the amount of $5,901,317.53. Of this latter amount, $1,083,126.75 was a debit adjustment of the Reserve for Amortization of Drilling

Costs. The accounting for well drilling costs is summarized briefly in order to emphasize the Company's practices concerning these costs as they have an important part in this case.

From the inception of the Company until 1923, only materials (casing, tubing, equipment, etc.) of producing properties were capitalized. Drilling costs were charged to operations through the following expense accounts:

Years 1898–1907, inclusive, Account 6, Drilling wells (construction).

Years 1908–1920, inclusive, Account 16, Drilling new wells (construction).

Years 1921–1922, inclusive:

Account 2A, Gas well labor.

Account 2B, Gas well supplies and expense.

Beginning in 1923 (effective date of the first West Virginia system of accounts) it became the policy of the Company to capitalize the well drilling costs (intangibles). However, concurrently with the charge to plant accounts, a reserve in equal amount was set up by a charge to Account 62E—Retirement and Depletion Expense—Drilling Costs, and a credit to a reserve account, Amortization of Drilling Costs. In 1932 the reserve balance was transferred to an account Retirement and Depletion Reserve—Drilling Costs. Otherwise the procedure remained the same until 1934 when the above-mentioned adjustment of $1,083,126.75 was recorded to restate the reserve on a production basis. The balance in the reserve was transferred to the Reserve for Depreciation—Gas Well Construction.

*Reserves Acquired.*

It has been the accounting policy of Hope Natural Gas Company to enter in its records the book cost and book reserve for depreciation in the case of property acquired from affiliated companies or properties purchased in their entirety. In the cases of property acquired from nonaffiliated public utility companies, the original cost has been recorded by Hope Natural Gas Company, in accordance with its own accounting practice, that is, to record as fixed capital all material cost and the direct construction cost, except well construction. The difference between the amount recorded in the plant account and the purchase price (purchase price is generally less than original cost) has been taken as the measure of accrued depreciation existing in

the property and, therefore, credited to the reserve for depreciation.

The reserve balances thus acquired have been considered in the examiners' report schedules and are shown on line 49 of Schedule No. 1. Schedule No. 1 shows the total of $2,389,561.09, which is identified with the total per books as follows:

| | | |
|---|---|---|
| Total reserves acquired, per books at Dec. 31, 1938 | | $2,164,107.45 |
| Items not included in line 49 of Schedule No. 1: | | |
| Drilling and cleaning equipment | $16,870.60 | |
| Teaming | 223.62 | |
| Autos and trucks | 24,817.61 | |
| Distribution plant | 165,041.79 | |
| Other property | 16,152.65 | |
| | | 223,106.27 |
| | | 1,941,001.18 |
| Items added to line 49 of Schedule No. 1: | | |
| Drilling and cleaning equipment | 303,996.37 | |
| Teaming | 42,020.98 | |
| Autos and trucks | 102,542.56 | |
| | | 448,559.91 |
| Total | | 2,389,561.09 |

Examiners' adjusting entry No. 303, shown in the original cost study, reduces the capitalized cost and the acquired reserves in the amount of $412,186.80 as explained in that entry. The charge to the reserve is included in the depreciation report schedules as shown in Subschedule No. 7A.

6 *Reserve Charges.*

A summary of charges to the depreciation reserve is shown, by years, as follows:

| *Year.* | *Amount* | *Note* |
|---|---|---|
| 1920 | $95,679.06 | (1) |
| 1921 | 524,880.79 | (1) |
| 1922 | 388,491.61 | (1) |
| 1923 | 205,090.31 | (2) |
| 1924 | 166,248.13 | (2) |
| 1925 | 150,062.04 | (1) |
| 1926 | 195,875.40 | (1) |
| 1927 | 183,727.52 | (3) |
| 1928 | 241,289.01 | (3) |
| 1929 | 191,551.64 | (3) |
| 1930 | 253,816.71 | (3) |
| 1931 | 236,287.30 | (3) |
| 1932 | 192,895.90 | (3) |
| 1933 | 120,664.38 | (2) |
| 1934 | 184,494.87 | (2) |

| Year: | Amount | Note |
|---|---|---|
| 1934 Adj | $205,034.27 | (a) |
| 1935 | 215,605.44 | (2) |
| 1936 | 336,149.86 | (2) |
| 1937 | 407,843.61 | (2) |
| 1938 | 392,460.61 | (2) |
| | 4,888,748.46 | |
| Adjustment from reserve for amortization of drilling costs | 2,791,131.13 | |
| Total charges | $7,679,879.59 | |

There were no charges made to the depreciation reserve until 1920. Prior to 1920, property retirements were handled through an account called Depreciation and Adjustment account, which in turn was closed to surplus. From 1920 to 1938 the reserve was charged as described in the following notes:

1. Reserve charged with the computed amount of depreciation accruals on the property retired. The profit or loss on retirements, computed on the ratio of the reserve to the investment at the beginning of the year, was charged or credited to surplus.

2. Reserve charged with the excess of book cost over salvage value of property retired.

3. Reserve charges computed as in (1) but corrected by (a). As corrected represents excess of cost over salvage.

In order to determine the past loss on property retired, detailed analyses of the depreciation reserve, surplus, and other accounts have been made by the Federal Power Commission examiners and the Company. The Company has further classified the losses sustained by the property groups shown in the examiners' report schedules. These studies made by the Company and the examiners have been reconciled for the entire period. The results of the studies are set forth in Schedule No. 7 of this exhibit and applied to the report schedules as shown on line 53 of Schedule No. 1.

*Costs Subject to Depreciation and Depletion.*

Plant accounts have been summarized from the various depreciation schedules in order to bring out, in condensed form on the report schedules, the fact that all plant costs, from the inception of the Company have been considered in the depreciation and depletion calculations.

Line Nos. 1 to 5, inclusive, of Schedules Nos. 1 to 5, inclusive, show certain totals which are explained by the five captions, as follows:

Line No. 1—Original charges per books.

Line No. 2—Adjustments by examiners.

Line No. 3—Adjusted total cost subject to depreciation and depletion.

Line No. 4—Retirements.

Line No. 5—Adjusted book cost, December 31, 1938.

The adjusted book cost at December 31, 1938, agrees with the total shown in the exhibit on the original cost of gas plant accounts (excluding the specific distribution property), in the amount of $51,207,620.64, shown on Line No. 5 of Schedule No. 1.

Line No. 4 of Schedule No. 1 shows the accumulated credits to plant costs, for property retired, in the amount of $21,341,265.64. A related amount, the retirements less salvage value, is shown on line No. 53 as a charge to the accrued reserve.

Line No. 3 sets forth the total original cost subject to depreciation and depletion after giving effect to the examiners' adjustments, but before retirements are deducted.

Line No. 2 shows examiners' adjustments applied to the original charges per books. The examiners' adjustments referred to are those set forth in the exhibit on the original cost of gas plant accounts in the amount of $2,099,171.81. This amount is reconciled as follows:

| | |
|---|---|
| Examiners' adjustments: | |
| Schedule No. 2—Depletable property | $ 694,604.21 |
| Schedule No. 3—Depreciable production property | 283,903.35 |
| Schedule No. 4—Transmission property | 889,079.68 |
| Schedule No. 5—General property | 521,191.25 |
| Schedule No. 1—Nondepreciable plant | 53,550.37 |
| Schedule No. 1—Summary | 1,043,329.44 |
| Other Accounts: | |
| Unoperated leaseholds | 104,811.48 |
| Coke oven gas property | 186,320.44 |
| Unoperated leaseholds transferred | 583,382.23 |
| Coke oven gas property transferred | 762,592.06 |
| Total other accounts | 1,055,842.37 |
| Total plant adjustments | 2,099,171.81 |

Line No. 1, Original Charges Per Books, represents the book charges of the Company's gross additions to plant accounts.

For the purpose of spreading the loss in service value as equitable as possible over the service life, the plant costs, adjustments, retirements, etc., have been classified by property groups and years. The classification is in accordance with a study made by the Company; certain details of which are set forth in Company Exhibit No. 24. These property groups are shown in detail on Schedules 2 to 5, inclusive. They are listed below:

| | Property group | Basis of depreciation and depletion | Service life in years |
|---|---|---|---|
| 1 | Operated acreage | Annual production | |
| 2 | Field line R/W and construction cost | Annual production | |
| 3 | Gas well construction | Annual production | |
| 4 | Cost of abandoning gas wells | Annual production | |
| 5 | Production system structures | Group service life | 24 |
| 6 | Field line material, measuring and regulating station equipment | Group service life | 45 |
| 7 | Gas well equipment | Group service life | 40 |
| 8 | Drilling and cleaning equipment | Clearing accounts at company rates. | |
| 9 | Main line R/W and labor | Group service life | 64 |
| 10 | Transmission structures | Group service life | 40 |
| 11 | Main line material, measuring and regulating station equipment | Group service life | 64 |
| 12 | Compressor station equipment | Group service life | 30 |
| 13 | General structures | Group service life | 46 |
| 14 | Office furniture and equipment | Group service life | 28 |
| 15 | Other general equipment | Group service life | 27 |
| 16 | Communication system | Group service life | 26 |
| 17 | Autos and trucks | Clearing accounts at company rates. | |

Items 1, 2, 3, and 4 above are further subdivided into Production Areas, which areas are shown in an exhibit prepared by the Commission geologists, and certain miscellaneous groups. In order to reduce the number of columns in this report the 73 Production Areas have been summarized by the pool sheet numbers as shown on Subschedules 2A, 2B, 2C, and 2D.

Depreciation and depletion expense has been computed year by year and this annual charge is shown on lines 6 to 47 of Schedule No. 1. It is computed on the average investment for the year. Lines 48 to 54 show how the annual expense is directly related to the reserve.

Following this statement are the examiners' adjusting entries to give effect to the annual and accrued depreciation and deple-

tion, as determined by the examiners and submitted in the accompanying schedules.

The purpose and contents of the entries are described, briefly, in order:

Entry No. 1 removes certain amounts in the Reserves for Depreciation and Depletion as recorded on the Company's
11 books at December 31, 1938. These reserves are admittedly overstated. In the explanation of the entry, certain amounts, which have not been adjusted by the examiner, are listed and described.

Entry No. 2 sets up the accrued Reserve for Depreciation and Depletion as determined by the examiner. One effect of these entries is to increase the earned surplus approximately $15,800,000.00.

Entry No. 3 is to remove depreciation and depletion expense, as recorded by the Company, from the income account for the years 1937, 1938, and 1939. Details of the provisions removed, and certain provisions not removed, are shown in the explanation of the entry.

Entry No. 4 removes the charges to the Reserve for Cost of Abandoning, representing the actual costs incurred during the years 1937 and 1938, and includes them as an operating expense item in the income account.

The reserve for abandoning property, as computed by the Company, has been eliminated in the examiners' study. The largest part of this charge is cost of abandoning gas wells. The examiners have provided a reserve for the cost to abandon all gas wells in service at December 31, 1938, based on an average cost to abandon of $1,007.40 per well, computed on the Company's production. The reserve maintained by the Company has little significance in that the provisions and charges thereto are practically equal.

12 Entry No. 5 removes the charges to the Reserve for Unoperated Acreage, representing the actual abandonments as recorded during the years 1937, 1938, and 1939 and includes them in Exploration and Development Costs.

The Reserve for Unoperated Acreage has been eliminated in the examiners' study. The Company has computed provisions at varying rates, beginning in 1920. The rate from 1927 to 1938 was 8% per annum on the balance in the account.

Entry No. 6 is an adjustment relating to the original cost study. In that study entry No. 324 credited the reserve for Unoperated

Acreage in the amount of $104,811.48. Since the reserve has been discontinued, this amount is transferred to earned surplus as it represents an over-abandonment of lease costs in the past. In the study of Exploration and Development Cost this amount has been prorated to all leases surrendered to December 31, 1938. The costs in the income statement are adjusted for the years 1937 and 1938.

Entry No. 7 is to record the depreciation and depletion expense, as determined by the examiner, in the income account. Details of this expense for the year 1939 will be presented in a supplemental statement, as the present study ends at December 31, 1938.

Clarksburg, West Virginia, March 18, 1941.

EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge, of Field Assignment.*

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*
CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

[Pages 13 to 22 omitted.]

## HOPE NATURAL GAS COMPANY

*Summary of annual and accrued depreciation and depletion of gas plant in service (exclusive of distribution plant) as at Dec. 31, 1938*

| Line No. | Particulars | Total plant | Total depletable plant | Depreciable plant | | | | Nondepreciable plant |
|---|---|---|---|---|---|---|---|---|
| | | | | Total | Production plant | Transmission plant | General plant | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | Cost subject to depletion and depreciation: | | | | | | | |
| 1 | Original charges per books | $73,592,215.72 | $10,960,583.23 | $62,273,654.34 | $32,120,155.02 | $27,654,279.04 | $2,499,217.28 | $327,981.15 |
| 2 | Adjustments by examiners | *1,043,329.44* | 694,604.21 | *1,694,174.28* | *285,305.55* | *889,079.88* | *521,191.25* | *45,759.97* |
| 3 | Adjusted total cost, subject to depletion and depreciation | 72,548,886.28 | 11,655,187.44 | 60,579,477.06 | 31,836,261.67 | 26,765,199.16 | 1,978,026.03 | 284,221.78 |
| 4 | Less retirements | 21,341,365.64 | 1,728,823.82 | 19,612,441.82 | 15,483,572.42 | 3,062,713.22 | 1,066,176.18 | |
| 5 | Adjusted book cost, Dec. 31, 1938 | 51,207,020.64 | 9,956,363.62 | 40,967,035.24 | 16,352,689.25 | 23,702,486.14 | 911,849.85 | 284,221.78 |
| | Depletion and depreciation computed annually: | | | | | | | |
| 6 | 1898 | 44.75 | | 44.75 | 28.26 | | 16.49 | |
| 7 | 1899 | 674.88 | | 674.88 | 477.70 | 163.94 | 33.24 | |
| 8 | 1900 | 3,347.29 | | 3,347.29 | 1,963.44 | 1,347.54 | 36.31 | |
| 9 | 1901 | 5,622.47 | | 5,622.47 | 3,216.56 | 2,363.46 | 42.45 | |
| 10 | 1902 | 24,828.18 | | 24,828.18 | 17,191.25 | 7,356.05 | 280.88 | |
| 11 | 1903 | 59,662.11 | | 59,662.11 | 36,022.27 | 22,918.82 | 721.02 | |
| 12 | 1904 | 98,392.08 | | 98,392.08 | 46,582.69 | 42,869.33 | 940.06 | |
| 13 | 1905 | 108,938.97 | | 108,938.97 | 53,956.10 | 53,974.34 | 1,008.53 | |
| 14 | 1906 | 118,075.86 | | 118,075.86 | 58,051.47 | 58,913.81 | 1,110.58 | |
| 15 | 1907 | 132,783.20 | | 132,783.20 | 64,795.95 | 66,585.42 | 1,401.85 | |
| 16 | 1908 | 146,325.83 | | 146,326.83 | 73,144.76 | 71,284.39 | 1,897.68 | |
| 17 | 1909 | 166,956.08 | | 166,956.08 | 84,665.82 | 80,093.51 | 2,256.75 | |
| 18 | 1910 | 289,318.02 | | 289,318.02 | 106,474.35 | 180,021.94 | 2,841.73 | |
| 19 | 1911 | 258,247.64 | | 258,247.64 | 131,564.19 | 122,686.69 | 3,996.73 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 20 | 1912 | 292,178 46 | | 292,178 46 | 150,256 59 | 130,578 60 | 5,343 37 | |
| 21 | Prior to 1913 | 973,744 15 | 973,744 15 | | | | | |
| 22 | 1913 | 471,329 40 | 145,615 61 | 325,713 79 | 167,343 33 | 141,880 19 | 6,490 27 | |
| 23 | 1914 | 511,469 04 | 151,055 19 | 360,413 85 | 185,413 24 | 167,987 58 | 7,013 03 | |
| 24 | 1915 | 551,059 38 | 169,231 80 | 381,824 58 | 199,135 05 | 175,400 50 | 7,289 02 | |
| 25 | 1916 | 741,739 90 | 337,934 30 | 403,802 90 | 215,634 34 | 180,333 48 | 7,834 78 | |
| 26 | 1917 | 786,308 83 | 344,001 31 | 442,305 52 | 244,183 48 | 189,031 80 | 9,090 24 | |
| 27 | 1918 | 780,256 41 | 296,376 30 | 483,879 81 | 268,364 27 | 204,675 51 | 10,840 03 | |
| 28 | 1919 | 800,991 56 | 281,037 14 | 519,957 42 | 286,074 81 | 221,771 35 | 12,111 26 | |
| 29 | 1920 | 860,210 01 | 343,465 93 | 546,744 08 | 298,591 86 | 233,376 05 | 14,773 17 | |
| 30 | 1921 | 774,284 96 | 307,809 45 | 566,475 51 | 298,840 41 | 248,783 25 | 19,051 85 | |
| 31 | 1922 | 804,471 30 | 225,894 91 | 578,576 45 | 295,055 66 | 262,466 91 | 21,053 88 | |
| 32 | 1923 | 894,395 40 | 306,841 06 | 587,544 34 | 297,596 98 | 268,667 13 | 21,280 23 | |
| 33 | 1924 | 950,159 53 | 337,634 14 | 612,555 39 | 305,198 65 | 285,851 83 | 21,504 91 | |
| 34 | 1925 | 1,021,168 32 | 340,540 29 | 680,628 03 | 315,102 59 | 342,671 56 | 22,853 88 | |
| 35 | 1926 | 1,089,323 96 | 331,396 44 | 757,927 52 | 326,881 05 | 405,158 72 | 25,887 75 | |
| 36 | 1927 | 1,046,450 70 | 250,185 72 | 796,264 98 | 343,110 53 | 424,954 56 | 28,199 89 | |
| 37 | 1928 | 1,096,241 20 | 255,957 30 | 840,283 90 | 372,245 80 | 439,089 42 | 28,978 68 | |
| 38 | 1929 | 1,123,521 69 | 287,690 79 | 835,830 90 | 365,101 63 | 437,712 57 | 33,046 70 | |
| 39 | 1930 | 1,084,074 67 | 225,967 93 | 858,076 74 | 378,821 33 | 453,304 42 | 35,950 99 | |
| 40 | 1931 | 1,069,704,61 | 195,362 87 | 874,341 74 | 377,705 36 | 459,893 30 | 36,743 08 | |
| 41 | 1932 | 994,636 30 | 123,679 86 | 870,956 44 | 375,886 81 | 459,190 77 | 36,875 86 | |
| 42 | 1933 | 1,015,814 61 | 146,726 08 | 869,088 53 | 373,728 39 | 458,271 62 | 37,088 52 | |
| 43 | 1934 | 1,075,933 80 | 197,768 81 | 878,165 29 | 382,107 72 | 458,380 50 | 37,677 07 | |
| 44 | 1935 | 1,229,133 06 | 342,212 91 | 886,920 15 | 390,376 63 | 458,427 95 | 38,115 57 | |
| 45 | 1936 | 1,400,203 72 | 500,651 84 | 899,551 88 | 389,083 57 | 471,973 40 | 38,495 21 | |
| 46 | 1937 | 1,361,475 07 | 446,640 10 | 914,834 97 | 388,735 58 | 486,660 03 | 39,439 36 | |
| 47 | 1938 | 1,208,747 62 | 351,515 17 | 917,232 45 | 388,006 13 | 488,400 38 | 40,825 94 | |
| 48 | Total annual accruals | 27,404,259 85 | 8,116,906 20 | 19,287,353 66 | 9,036,462 49 | 9,590,502 52 | 660,388 84 | |
| 49 | Add—Reserves acquired | 2,389,561 09 | 136,809 23 | 2,252,751 86 | 1,696,405 95 | 416,235 61 | 140,110 30 | |
| 50 | Total accruals and reserves acquired | 29,793,820 94 | 8,253,715 43 | 21,540,105 51 | 10,732,868 44 | 10,006,737 93 | 800,499 14 | |

*Summary of annual and accrued depreciation and depletion of gas plant in service (exclusive of distribution plant) as at Dec. 31, 1938*—Con.

| Line No. | Particulars | Total | Total depletable plant | Depreciable plant | | | | Nondepreciable plant |
|---|---|---|---|---|---|---|---|---|
| | | | | Total | Production plant | Transmission plant | General plant | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | Less—Retirement losses: | | | | | | | |
| 51 | Loss on retirements per books as reclassified | $4,653,815.77 | $1,681,601.07 | $2,972,214.70 | $1,711,799.33 | $1,133,907.21 | $126,508.16 | |
| 52 | Loss on retirements per examiners' adjusting entries | 1,638,649.37 | *40,265.57* | 1,678,914.94 | 347,833.26 | 1,093,540.87 | 237,540.71 | |
| 53 | Total retirement losses | 6,292,465.14 | 1,641,335.50 | 4,651,129.64 | 2,059,632.59 | 2,227,448.18 | 364,048.87 | |
| 54 | Total reserves for depletion and depreciation of gas plant in service, as adjusted Dec. 31, 1938 | 23,501,355.80 | 6,612,379.93 | 16,888,975.87 | 8,673,235.85 | 7,779,289.75 | 436,450.27 | |
| | Net adjusted book cost, Dec. 31, 1938: | | | | | | | |
| 55 | Adjusted original book cost | 51,207,620.64 | 9,956,363.62 | 40,967,035.24 | 16,352,699.25 | 23,702,486.14 | 911,849.85 | $284,221.78 |
| 56 | Adjusted depreciation reserves | 23,501,355.80 | 6,612,379.93 | 16,888,975.87 | 8,673,235.85 | 7,779,289.75 | 436,450.27 | |
| 57 | Net book cost | 27,706,264.84 | 3,343,983.69 | 24,078,059.37 | 7,679,463.40 | 15,923,196.39 | 475,399.58 | 284,221.78 |

Italic figures denote decrease.

[Page 24 omitted.]

HOPE NATURAL GAS COMPANY

Schedule No. 2

*Summary of Annual and Accrued Depletion Production Plant—Depletable Property as at Dec. 31, 1938*

| Line No. | Particulars (a) | Total (b) | Operated acreage (c) | Field line right-of-way and construction cost (d) | Gas well construction (e) | Cost of abandoning gas wells (f) |
|---|---|---|---|---|---|---|
| | Cost subject to depletion: | | | | | |
| 1 | Original charges per books | $10,990,583.23 | $1,723,573.48 | $4,089,799.13 | $5,177,210.62 | |
| 2 | Adjustments | 694,604.21 | 267,904.31 | 707,834.98 | *281,135.08* | |
| 3 | Adjusted total cost subject to depletion | 11,685,187.44 | 1,991,477.79 | 4,797,634.11 | 4,896,075.54 | |
| 4 | Less retirements | 1,728,823.82 | 392,472.93 | 529,753.06 | 806,597.83 | |
| 5 | Adjusted book cost, Dec. 31, 1938 | 9,956,363.62 | 1,599,004.86 | 4,267,881.05 | 4,089,477.71 | |
| | Depletion, computed annually | | | | | |
| 6 | Prior to 1913 | 973,743.15 | 262,458.92 | 395,208.33 | | $316,075.90 |
| 7 | 1913 | 145,615.61 | 37,119.67 | 60,189.61 | | 48,306.33 |
| 8 | 1914 | 151,055.19 | 34,719.12 | 61,339.37 | | 54,996.70 |
| 9 | 1915 | 160,231.80 | 38,706.49 | 67,275.55 | | 63,249.76 |
| 10 | 1916 | 337,934.30 | 72,891.60 | 135,740.96 | | 129,301.74 |
| 11 | 1917 | 344,001.31 | 66,277.40 | 149,985.00 | | 127,738.91 |
| 12 | 1918 | 296,376.30 | 55,055.49 | 128,702.88 | | 112,617.93 |
| 13 | 1919 | 281,037.14 | 46,793.12 | 132,796.32 | | 101,447.70 |
| 14 | 1920 | 343,465.93 | 54,904.83 | 165,144.68 | | 123,416.42 |
| 15 | 1921 | 207,809.45 | 30,363.83 | 103,907.84 | | 73,537.78 |
| 16 | 1922 | 225,894.91 | 32,008.22 | 114,069.64 | | 79,817.05 |
| 17 | 1923 | 306,841.06 | 29,669.55 | 118,047.24 | 82,321.65 | 76,802.62 |
| 18 | 1924 | 337,604.14 | 27,325.32 | 117,279.91 | 116,664.31 | 76,334.60 |
| 19 | 1925 | 340,540.29 | 20,620.93 | 112,355.97 | 143,454.36 | 64,109.03 |
| 20 | 1926 | 331,396.44 | 23,139.83 | 110,459.16 | 137,431.23 | 60,466.22 |
| 21 | 1927 | 250,185.72 | 16,314.45 | 84,074.17 | 107,747.47 | 42,049.63 |

## *Summary of Annual and Accrued Depletion Production Plant—Depletable Property as at Dec. 31, 1938*—Continued

| Line No. | Particulars (a) | Total (b) | Operated acreage (c) | Field line right-of-way and construction cost (d) | Gas well construction (e) | Cost of abandoning gas wells (f) |
|---|---|---|---|---|---|---|
| | Depletion, computed annually—Continued. | | | | | |
| 22 | 1928 | $255,957.30 | $18,067.46 | $84,231.18 | $105,548.54 | $48,110.12 |
| 23 | 1929 | 287,660.79 | 23,504.77 | 96,699.61 | 110,588.29 | 56,868.12 |
| 24 | 1930 | 225,997.93 | 18,657.37 | 72,898.86 | 89,429.54 | 45,012.16 |
| 25 | 1931 | 195,362.87 | 16,550.67 | 65,728.81 | 71,477.85 | 41,605.54 |
| 26 | 1932 | 123,679.86 | 11,007.07 | 39,756.70 | 45,614.70 | 27,301.39 |
| 27 | 1933 | 140,726.08 | 11,573.17 | 40,444.63 | 55,076.56 | 30,631.72 |
| 28 | 1934 | 197,708.61 | 17,532.07 | 58,729.54 | 83,692.01 | 37,814.09 |
| 29 | 1935 | 342,212.91 | 30,253.68 | 93,890.63 | 165,335.81 | 53,762.79 |
| 30 | 1936 | 509,651.84 | 42,932.85 | 144,724.05 | 229,111.26 | 83,883.68 |
| 31 | 1937 | 446,640.10 | 40,703.86 | 131,847.14 | 198,255.61 | 75,833.49 |
| 32 | 1938 | 351,515.17 | 31,407.84 | 98,836.35 | 165,101.37 | 56,169.61 |
| 33 | Total annual accruals to Dec. 31, 1938 | 8,116,906.20 | 1,110,559.58 | 2,992,334.13 | 1,906,751.46 | 2,107,261.03 |
| 34 | Add—reserves acquired | 136,809.23 | | 136,809.23 | | |
| 35 | Total accruals and reserves acquired | 8,253,715.43 | 1,110,559.58 | 3,129,143.36 | 1,906,751.46 | 2,107,261.03 |
| | Less—Retirement losses: | | | | | |
| 36 | Loss on retirements per books as reclassified | 1,681,601.07 | 392,472.93 | 482,330.31 | 806,597.83 | |
| 37 | Loss on retirements per examiners' adjusting entries | *40,265.57* | *251,752.18* | 212,486.61 | | |
| 38 | Total retirement losses | 1,641,335.50 | 139,720.75 | 695,016.92 | 806,597.83 | |
| 39 | Total reserves for depletion of gas plant in service, as adjusted, Dec. 31, 1938 | 6,612,379.93 | 970,838.83 | 2,434,126.44 | 1,100,153.63 | 2,107,261.03 |
| | Net adjusted book cost, Dec. 31, 1938: | | | | | |
| 40 | Adjusted original book cost | 9,956,363.62 | 1,599,004.86 | 4,267,881.05 | 4,089,477.71 | |
| 41 | Adjusted depletion reserves | 6,612,379.93 | 970,838.83 | 2,434,726.44 | 1,100,153.63 | 2,107,261.03 |
| 42 | Net book cost | 3,343,983.69 | 628,166.03 | 1,833,754.61 | 2,989,324.08 | *2,107,261.03* |

Italic figures denote decrease.

[Pages 26 to 33 omitted.]

HOPE NATURAL GAS COMPANY

Schedule No. 3

*Annual and Accrued Depreciation Production Plant—Depreciable Property as at Dec. 31, 1938*

| Line No. | Particulars | Total | Structures | Field line material measuring and regulating station equipment | Gas well equipment | Drilling and cleaning equipment |
|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) |
| | Costs subject to depreciation: | | | | | |
| 1 | Original charges per books | $32,120,155.02 | $259,355.32 | $11,418,271.21 | $16,175,156.74 | $4,267,371.75 |
| 2 | Adjustments by examiners | *283,393.35* | 1,017.24 | *909,962.42* | *283,046.55* | 208,137.38 |
| 3 | Adjusted total cost subject to depreciation | 31,836,251.67 | 260,372.56 | 11,208,308.79 | 15,892,661.19 | 4,475,509.13 |
| 4 | Less—Retirements | 15,483,552.42 | 48,044.83 | 3,274,139.73 | 8,281,551.44 | 3,879,816.42 |
| 5 | Adjusted book cost, Dec. 31, 1938 | 16,352,699.25 | 212,327.73 | 7,934,169.06 | 7,610,509.75 | 595,692.71 |
| | Depreciation, computed annually | | 4.17% | 2.22% | 2.50% | |
| 6 | 1898 | 28.26 | | 28.26 | | See note |
| 7 | 1899 | 477.70 | 2.30 | 170.45 | 305.05 | |
| 8 | 1900 | 1,963.44 | 6.04 | 946.12 | 1,011.28 | |
| 9 | 1901 | 3,216.56 | 11.18 | 1,752.98 | 1,452.40 | |
| 10 | 1902 | 17,191.25 | 76.98 | 8,720.27 | 8,394.00 | |
| 11 | 1903 | 36,022.27 | 154.67 | 17,329.48 | 18,538.12 | |
| 12 | 1904 | 46,382.69 | 190.07 | 21,948.52 | 24,444.10 | |
| 13 | 1905 | 53,956.10 | 210.38 | 24,343.14 | 29,402.58 | |
| 14 | 1906 | 58,051.47 | 210.75 | 24,548.96 | 33,291.72 | |
| 15 | 1907 | 64,795.93 | 219.26 | 26,935.22 | 37,641.45 | |
| 16 | 1908 | 73,141.76 | 250.76 | 30,556.98 | 42,338.52 | |
| 17 | 1909 | 84,605.82 | 265.00 | 34,562.60 | 49,778.22 | |
| 18 | 1910 | 106,454.35 | 297.65 | 43,536.18 | 62,620.52 | |
| 19 | 1911 | 131,564.19 | 393.80 | 54,009.69 | 77,160.60 | |
| 20 | 1912 | 150,256.49 | 487.01 | 59,132.43 | 90,637.05 | |

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*Annual and Accrued Depreciation Production Plant—Depreciable Property as at Dec. 31, 1938—Continued*

| Line No. | Particulars | Total | Structures | Field line material measuring and regulating station equipment | Gas well equipment | Drilling and cleaning equipment |
|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) |
| | Depreciation, computed annually—Con. | | | | | |
| 21 | 1913 | $167,343.33 | $541.27 | $62,017.56 | $104,784.50 | |
| 22 | 1914 | 185,413.24 | 625.37 | 65,302.72 | 119,485.15 | |
| 23 | 1915 | 199,185.06 | 692.89 | 68,507.25 | 129,954.92 | |
| 24 | 1916 | 215,634.34 | 830.00 | 73,604.19 | 141,200.15 | |
| 25 | 1917 | 244,183.48 | 1,028.24 | 84,960.09 | 158,195.15 | |
| 26 | 1918 | 268,364.27 | 1,353.29 | 95,643.73 | 171,367.25 | |
| 27 | 1919 | 286,074.81 | 1,643.81 | 105,200.85 | 179,230.15 | |
| 28 | 1920 | 298,594.86 | 1,961.44 | 115,211.87 | 181,421.55 | |
| 29 | 1921 | 298,640.41 | 2,549.33 | 119,106.26 | 176,984.82 | |
| 30 | 1922 | 295,055.66 | 2,974.63 | 119,905.55 | 172,175.48 | |
| 31 | 1923 | 297,596.98 | 3,183.92 | 123,152.86 | 171,260.20 | |
| 32 | 1924 | 305,198.65 | 3,544.12 | 128,853.55 | 172,800.98 | |
| 33 | 1925 | 315,102.59 | 4,005.41 | 136,612.98 | 174,484.20 | |
| 34 | 1926 | 326,881.05 | 4,400.48 | 144,247.47 | 178,233.10 | |
| 35 | 1927 | 343,110.53 | 4,776.78 | 153,541.15 | 184,792.60 | |
| 36 | 1928 | 352,245.80 | 4,994.78 | 159,864.60 | 187,386.42 | |
| 37 | 1929 | 365,101.63 | 5,220.09 | 167,551.04 | 192,330.50 | |
| 38 | 1930 | 378,821.33 | 5,464.91 | 175,038.87 | 198,317.55 | |
| 39 | 1931 | 377,705.36 | 5,556.78 | 174,573.63 | 197,574.95 | |
| 40 | 1932 | 375,889.81 | 5,561.49 | 174,034.12 | 196,294.20 | |
| 41 | 1933 | 373,728.39 | 5,563.24 | 173,535.65 | 194,629.50 | |
| 42 | 1934 | 382,107.72 | 7,079.74 | 176,637.43 | 198,390.55 | |
| 43 | 1935 | 390,376.63 | 8,502.87 | 179,413.21 | 202,370.55 | |
| 44 | 1936 | 389,083.57 | 8,612.09 | 179,237.98 | 201,233.50 | |
| 45 | 1937 | 388,735.58 | 8,763.59 | 179,949.69 | 200,022.30 | |
| 46 | 1938 | 388,006.13 | 8,859.54 | 180,626.84 | 198,519.75 | |
| 47 | Total annual accruals to Dec. 31, 1938 | 9,030,462.49 | 111,155.39 | 3,864,851.52 | 5,000,455.58 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 48 | Add—Reserves acquired | 1,696,405.95 | 48,422.99 | 780,416.21 | 563,570.38 | $303,996.37 |
| 49 | Total accruals and reserves acquired | 10,732,868.44 | 159,578.38 | 4,645,267.73 | 5,624,025.96 | 303,996.37 |
| | Less—Retirement losses: | | | | | |
| 50 | Loss on retirements per books as reclassified | 1,711,709.33 | 30,939.04 | 608,958.79 | 1,071,901.50 | Note 1 |
| 51 | Loss on retirements per examiners' adjusting entries | 347,833.26 | 35,328.29 | 100,741.68 | 169,421.67 | 47,658.38 |
| 52 | Total refirement losses | 2,059,632.59 | 66,267.33 | 709,700.47 | 1,241,323.17 | 47,658.38 |
| 53 | Total reserves for depreciation of production plant as adjusted, Dec. 31, 1938 | 8,673,235.85 | 93,311.05 | 3,845,567.26 | 4,382,702.79 | 351,654.75 |
| | Net adjusted book cost, Dec. 31, 1938: | | | | | |
| 54 | Adjusted original book cost | 16,352,699.25 | 212,327.73 | 7,934,169.06 | 7,610,509.75 | 595,692.71 |
| 55 | Adjusted depreciation reserves | 8,673,235.85 | 93,311.05 | 3,845,567.26 | 4,382,702.79 | 351,654.75 |
| 56 | Net book cost—Production plant | 7,679,463.40 | 119,016.68 | 4,088,601.80 | 3,227,806.96 | 244,037.96 |

Italic figures denote decrease.

NOTE.—Depreciation expense on drilling and cleaning equipment is distributed through clearing accounts. Therefore, it is not practicable to revise the company's depreciation accounting. This reserve balance is the same as shown on the company's records as at Dec. 31, 1938.

## HOPE NATURAL GAS COMPANY

Schedule No. 4

*Annual and accrued depreciation transmission plant—as at Dec. 31, 1938*

| Line No. | Particulars | Total | Right-of-way and main line labor | Structures | Mains material and measuring and regulating station equipment | Compressor station equipment |
|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) |
| | Cost subject to depreciation: | | | | | |
| 1 | Original charges per books | $27,654,279.04 | $5,787,107.56 | $1,893,329.35 | $10,378,015.97 | $9,595,826.16 |
| 2 | Adjustments by examiners | *889,079.68* | *467,733.56* | *269,163.84* | 48,152.28 | *800,554.56* |
| 3 | Adjusted total cost subject to depreciation | 26,765,199.36 | 5,319,374.00 | 1,624,165.51 | 10,426,168.25 | 9,395,491.60 |
| 4 | Less—Retirements | 3,062,713.22 | 222,635.32 | 167,300.23 | 960,958.06 | 1,711,819.61 |
| 5 | Adjusted book cost, Dec. 31, 1938 | 23,702,486.14 | 5,096,738.68 | 1,456,865.28 | 9,465,210.19 | 7,683,671.99 |
| | Depreciation, computed annually | | | | | |
| 6 | 1898 | | 1.56% | 2.50% | 1.56% | 2.56% |
| 7 | 1899 | | | | | |
| 8 | 1900 | 163.94 | 142.38 | | 21.56 | |
| 9 | 1901 | 1,347.54 | 629.24 | | 718.30 | |
| 10 | 1902 | 2,303.46 | 954.84 | 1.48 | 1,407.14 | |
| 11 | 1903 | 7,356.05 | 1,558.94 | 334.35 | 5,462.76 | |
| 12 | 1904 | 22,918.82 | 4,769.87 | 948.92 | 17,200.03 | |
| 13 | 1905 | 42,869.33 | 11,141.71 | 923.52 | 29,474.14 | 1,329.96 |
| 14 | 1906 | 53,974.34 | 15,991.68 | 648.50 | 34,541.43 | 2,792.73 |
| 15 | 1907 | 58,913.81 | 17,337.11 | 1,180.02 | 35,093.23 | 5,303.45 |
| 16 | 1908 | 66,585.42 | 19,017.32 | 1,692.15 | 38,192.67 | 7,683.28 |
| 17 | 1909 | 71,284.39 | 20,852.93 | 1,757.88 | 40,736.61 | 7,936.97 |
| 18 | 1910 | 80,093.51 | 21,749.36 | 2,951.52 | 41,730.22 | 13,662.41 |
| 19 | 1911 | 100,021.94 | 24,339.01 | 4,844.05 | 48,158.79 | 22,680.09 |
| | | 122,686.69 | 30,466.49 | 5,760.55 | 59,503.98 | 26,955.67 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| 20 | 1912 | 136,578.60 | 34,900.13 | 6,272.85 | 66,029.70 | 29,375.92 |
| 21 | 1913 | 151,880.19 | 38,428.12 | 7,798.18 | 68,856.76 | 36,797.13 |
| 22 | 1914 | 167,987.58 | 42,493.61 | 9,350.70 | 72,204.02 | 44,369.25 |
| 23 | 1915 | 175,460.50 | 42,847.30 | 10,428.58 | 72,541.54 | 49,643.08 |
| 24 | 1916 | 180,333.48 | 43,333.82 | 10,898.55 | 72,327.82 | 53,773.29 |
| 25 | 1917 | 189,031.80 | 44,550.12 | 11,653.78 | 73,533.72 | 59,294.18 |
| 26 | 1918 | 204,675.51 | 45,327.83 | 13,788.25 | 76,857.75 | 69,701.68 |
| 27 | 1919 | 221,771.35 | 44,812.31 | 16,113.32 | 79,927.24 | 80,918.48 |
| 28 | 1920 | 233,376.05 | 42,719.63 | 18,702.89 | 80,502.02 | 91,451.51 |
| 29 | 1921 | 248,783.25 | 42,924.70 | 21,344.32 | 82,541.72 | 101,972.51 |
| 30 | 1922 | 262,466.91 | 44,898.09 | 22,604.56 | 86,828.16 | 108,136.10 |
| 31 | 1923 | 268,667.13 | 46,188.33 | 22,966.87 | 88,809.13 | 110,702.80 |
| 32 | 1924 | 285,851.83 | 49,896.19 | 23,963.23 | 95,317.45 | 116,674.96 |
| 33 | 1925 | 342,671.56 | 63,020.73 | 29,089.77 | 114,014.88 | 136,546.18 |
| 34 | 1926 | 405,158.72 | 73,861.54 | 37,024.63 | 128,507.67 | 165,764.88 |
| 35 | 1927 | 424,954.56 | 74,055.59 | 41,355.77 | 129,017.62 | 180,525.58 |
| 36 | 1928 | 429,059.42 | 74,214.46 | 42,554.32 | 129,428.10 | 182,862.54 |
| 37 | 1929 | 437,712.57 | 74,729.12 | 43,399.86 | 130,706.88 | 188,876.71 |
| 38 | 1930 | 453,304.42 | 75,457.66 | 44,764.50 | 132,458.90 | 200,623.36 |
| 39 | 1931 | 459,893.30 | 75,020.71 | 45,683.46 | 131,978.19 | 205,610.94 |
| 40 | 1932 | 458,190.77 | 75,476.72 | 45,700.37 | 132,859.57 | 204,154.11 |
| 41 | 1933 | 458,271.62 | 75,481.80 | 45,506.97 | 132,897.20 | 204,385.65 |
| 42 | 1934 | 458,380.50 | 75,485.75 | 45,447.46 | 132,945.73 | 204,501.56 |
| 43 | 1935 | 458,427.95 | 75,486.98 | 45,516.72 | 132,966.02 | 204,458.23 |
| 44 | 1936 | 471,973.10 | 80,625.03 | 45,274.13 | 139,717.87 | 206,356.07 |
| 45 | 1937 | 486,660.03 | 86,539.44 | 45,000.02 | 146,777.37 | 208,343.20 |
| 46 | 1938 | 488,400.38 | 87,322.17 | 44,921.20 | 146,989.64 | 209,167.37 |
| 47 | Total annual accruals to Dec. 31, 1938 | 9,590,502.32 | 1,799,218.76 | 818,168.20 | 3,229,783.53 | 3,743,331.83 |
| 48 | Add—Reserves acquired | 416,235.61 | | 90,220.83 | 39,552.03 | 286,462.75 |
| 49 | Total accruals and reserves acquired | 10,006,737.93 | 1,799,218.76 | 908,389.03 | 3,269,335.56 | 4,029,794.58 |

*Annual and accrued depreciation transmission plant—as at Dec. 31, 1938*—Continued

| Line No. | Particulars | Total | Right-of-way and main line labor | Structures | Mains material and measuring and regulating station equipment | Compressor station equipment |
|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) |
| | Less—Retirement losses: | | | | | |
| 50 | Loss on retirements per books as reclassified | $1,133,907.21 | $181,381.43 | $127,049.06 | $318,886.82 | $506,639.90 |
| 51 | Loss on retirements per examiners' adjusting entries | 1,093,540.97 | 301,197.24 | 285,508.72 | 87,498.90 | 419,336.11 |
| 52 | Total retirement losses | 2,227,448.18 | 482,528.67 | 412,557.78 | 406,385.72 | 925,976.01 |
| 53 | Total reserves for depreciation of transmission plant, as adjusted, Dec. 31, 1938 | 7,779,289.75 | 1,316,690.09 | 495,831.25 | 2,862,949.84 | 3,103,818.57 |
| | Net adjusted book cost, Dec. 31, 1938: | | | | | |
| 54 | Adjusted original book cost | 23,702,486.14 | 5,096,738.68 | 1,456,865.28 | 9,465,210.19 | 7,683,671.99 |
| 55 | Adjusted depreciation reserves | 7,779,289.75 | 1,316,690.09 | 495,831.25 | 2,862,949.84 | 3,103,818.57 |
| 56 | Net book cost—Transmission plant | 15,923,196.39 | 3,780,048.59 | 961,034.03 | 6,602,260.35 | 4,579,853.42 |

Italic figures denote decrease

Schedule No. 5

## Hope Natural Gas Company

*Annual and accrued depreciation general plant—as at Dec. 31, 1938*

| Line No. | Particulars | Total | Structures and improvements | Office furniture and equipment | Other equipment | Communication system | Autos and trucks |
|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | Cost subject to depreciation | | | | | | |
| 1 | Original charges per books | $2,499,217.28 | $266,206.11 | $326,735.16 | $670,295.48 | $290,453.28 | $945,527.25 |
| 2 | Adjustments by examiners | *521,191.25* | *36,717.52* | *61,305.98* | *554,366.85* | *0* | *68,800.92* |
| 3 | Adjusted total cost subject to depreciation | 1,978,026.03 | 229,488.59 | 265,429.18 | 315,928.63 | 290,453.28 | 876,726.33 |
| 4 | Less—Retirements | 1,066,176.18 | 3,600.81 | 86,745.84 | 199,870.15 | 41,477.84 | 734,481.84 |
| 5 | Adjusted book costs, Dec. 31, 1938 | 911,849.85 | 225,887.78 | 178,683.34 | 115,988.50 | 248,975.74 | 142,314.49 |
| | Depreciation, computed annually | | 2.86% 1898-1929<br>2.17% 1930-1938 | 4.00% | 3.57% | 3.85% | |
| 6 | 1898 | 16.49 | | | 16.49 | | |
| 7 | 1899 | 33.24 | | | 33.24 | | See note. |
| 8 | 1900 | 36.31 | | | 36.31 | | |
| 9 | 1901 | 42.45 | | | 42.05 | .40 | |
| 10 | 1902 | 280.88 | .40 | 67.52 | 209.42 | 3.54 | |
| 11 | 1903 | 721.02 | 1.52 | 157.68 | 542.18 | 19.64 | |
| 12 | 1904 | 940.06 | 6.84 | 204.16 | 692.87 | 36.19 | |
| 13 | 1905 | 1,008.53 | 18.33 | 242.40 | 706.18 | 41.62 | |
| 14 | 1906 | 1,110.58 | 25.17 | 277.96 | 763.37 | 44.08 | |
| 15 | 1907 | 1,401.85 | 28.57 | 480.80 | 840.31 | 52.17 | |
| 16 | 1908 | 1,897.68 | 99.70 | 719.52 | 952.87 | 125.59 | |
| 17 | 1909 | 2,256.75 | 168.65 | 836.32 | 1,057.51 | 194.27 | |
| 18 | 1910 | 2,841.73 | 178.26 | 1,158.28 | 1,197.31 | 307.88 | |
| 19 | 1911 | 3,996.73 | 152.81 | 1,487.40 | 1,267.78 | 1,088.74 | |
| 20 | 1912 | 5,343.37 | 198.43 | 1,636.68 | 975.11 | 2,533.15 | |

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*Annual and accrued depreciation general plant—as at Dec. 31, 1938*—Continued

| Line No. | Particulars | Total | Structures and improvements | Office furniture and equipment | Other equipment | Communication system | Autos and trucks |
|---|---|---|---|---|---|---|---|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 21 | Depreciation, computed annually—continued. | | | | | | |
| 22 | 1913 | $6,490.27 | $253.63 | $1,794.20 | $780.58 | $3,631.86 | |
| 23 | 1914 | 7,043.03 | 289.29 | 1,890.88 | 856.01 | 4,006.85 | |
| 24 | 1915 | 7,209.02 | 296.50 | 1,964.56 | 867.08 | 4,080.88 | |
| 25 | 1916 | 7,834.78 | 322.87 | 2,305.12 | 991.50 | 4,215.29 | |
| 26 | 1917 | 9,090.24 | 342.00 | 2,813.20 | 1,461.49 | 4,473.55 | |
| 27 | 1918 | 10,840.03 | 593.22 | 3,351.72 | 1,967.32 | 4,927.77 | |
| 28 | 1919 | 12,111.26 | 845.73 | 3,807.88 | 2,196.16 | 5,261.49 | |
| 29 | 1920 | 14,773.17 | 847.05 | 4,296.28 | 5,056.12 | 4,573.72 | |
| 30 | 1921 | 19,051.85 | 847.05 | 4,885.40 | 9,086.94 | 4,232.46 | |
| 31 | 1922 | 21,053.88 | 848.96 | 5,112.12 | 10,476.38 | 4,616.42 | |
| 32 | 1923 | 21,280.23 | 850.88 | 5,186.32 | 10,614.29 | 4,628.74 | |
| 33 | 1924 | 21,504.91 | 850.88 | 5,380.20 | 10,448.93 | 4,824.90 | |
| 34 | 1925 | 22,853.88 | 854.40 | 5,701.80 | 10,460.46 | 5,837.22 | |
| 35 | 1926 | 25,887.75 | 973.54 | 6,516.20 | 10,853.16 | 7,544.85 | |
| 36 | 1927 | 28,199.89 | 1,147.78 | 7,273.32 | 11,230.83 | 8,547.96 | |
| 37 | 1928 | 28,978.68 | 1,206.32 | 7,565.08 | 11,410.15 | 8,797.13 | |
| 38 | 1929 | 33,046.70 | 3,959.10 | 8,051.88 | 11,957.07 | 9,078.65 | |
| 39 | 1930 | 35,950.99 | 5,281.24 | 8,537.72 | 12,830.12 | 9,301.91 | |
| 40 | 1931 | 36,743.08 | 5,511.28 | 8,707.92 | 13,103.95 | 9,359.93 | |
| 41 | 1932 | 36,875.86 | 5,543.98 | 8,860.68 | 13,123.71 | 9,347.49 | |
| 42 | 1933 | 37,088.52 | 5,535.30 | 8,932.56 | 13,284.12 | 9,356.54 | |
| 43 | 1934 | 37,677.07 | 5,535.00 | 9,032.48 | 13,738.54 | 9,371.05 | |
| 44 | 1935 | 38,115.57 | 5,534.67 | 9,216.84 | 13,981.69 | 9,382.37 | |
| 45 | 1936 | 38,495.21 | 5,534.67 | 9,265.92 | 14,267.47 | 9,427.15 | |
| 46 | 1937 | 39,439.36 | 5,534.67 | 9,361.00 | 15,055.40 | 9,488.29 | |
| 47 | 1938 | 40,825.94 | 5,616.61 | 9,522.80 | 16,141.99 | 9,544.54 | |
| | Total annual accruals to Dec. 31, 1938 | 660,388.84 | 65,865.30 | 166,602.80 | 245,614.46 | 182,306.28 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 48 | Add—Reserve acquired | 140, 110. 30 | 9, 860. 03 | 13, 209. 58 | 10, 863. 39 | 3, 634. 74 | 102, 542. 56 |
| 49 | Total accruals and reserves acquired | 800, 499. 14 | 75, 725. 33 | 179, 812. 38 | 256, 477. 85 | 185, 941. 02 | 102, 542. 56 |
| | Less—Retirement losses: | | | | | | |
| 50 | Loss on retirements per books as reclassified | 126, 508. 16 | 3, 522. 81 | 55, 023. 13 | 60, 752. 89 | 7, 209. 33 | See note. |
| 51 | Loss on retirements per examiners' adjusting entries | 237, 540. 71 | 5, 489. 65 | 61, 305. 98 | 173, 353. 73 | 0 | *2, 608. 65* |
| 52 | Total retirement losses | 364, 048. 87 | 9, 012. 46 | 116, 329. 11 | 234, 106. 62 | 7, 209. 33 | *2, 608. 65* |
| 53 | Total reserves for depreciation of general plant, as adjusted, Dec. 31, 1938 | 436, 450. 27 | 66, 712. 87 | 63, 483. 27 | 22, 371. 23 | 178, 731. 69 | 105, 151. 21 |
| | Net adjusted book cost, Dec. 31, 1938: | | | | | | |
| 54 | Adjusted original book cost | 911, 849. 85 | 225, 887. 78 | 178, 683. 34 | 115, 988. 50 | 248, 975. 74 | 142, 314. 49 |
| 55 | Adjusted depreciation reserves | 436, 450. 27 | 66, 712. 87 | 63, 483. 27 | 22, 371. 23 | 178, 731. 69 | 105, 151. 21 |
| 56 | Net book cost—General plant | 475, 399. 58 | 159, 174. 91 | 115, 200. 07 | 93, 617. 27 | 70, 244. 05 | 37, 163. 28 |

NOTE.—Depreciation expense on autos and trucks and teaming is not distributed through clearing accounts. It is not considered necessary to revise the company's depreciation accounting. The reserve balance is the same as shown on the company's records as of Dec. 31, 1938.

Italic figures denote decrease.

Schedule 6

## HOPE NATURAL GAS COMPANY

### *Depreciation and Depletion Reserves, Per Books from Jan. 1, 1937, to Dec. 31, 1938*

| Plant accounts | Reserve balance Jan. 1, 1937 | Provisions 1937 | | Reserve charges | Reserve balance Dec. 31, 1937 | Provisions 1938 | | Reserve charges | Reserve balance Dec. 31, 1938 | Transferred to new accounts as of Jan. 1, 1939 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rate | Amount | | | Rate | Amount | | | 250-1 | Other accounts | |
| | | | | | | | | | | | No. | Amount |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) |
| Production system: | | | | | | | | | | | | |
| Operated acreage | $418,197.54 | Depletion | $58,465.39 | $7,940.81 | $468,722.12 | Depletion | $30,722.15 | $10,409.79 | $489,034.48 | | 250-2 | $489,034.48 |
| Unoperated acreage | 231,589.64 | 8% | 40,683.22 | 19,824.10 | 252,448.76 | 8% | 40,678.77 | 61,828.01 | 231,299.52 | | 250-3 | 231,299.52 |
| Gas well equipment | 5,393,989.67 | Depletion | 166,565.24 | 56,640.45 | 5,503,914.46 | Depletion | 86,716.27 | 73,839.53 | 5,519,276.99 | $5,519,276.99 | | |
| Gas well construction | 2,357,360.29 | Depletion | 132,741.57 | 95,643.72 | 2,394,458.14 | Depletion | 74,045.35 | 127,406.38 | 2,347,097.11 | 2,347,097.11 | | |
| Other field investment | 9,805,545.57 | 4% | 100,598.87 | 41,763.92 | 10,123,755.90 | 3% | 342,977.93 | 84,991.74 | 10,381,742.09 | 10,381,742.09 | | |
| Leases and easements | 456,930.39 | 4% | 460,573.12<br>21,008.55 | 1,989.27 | 475,949.67 | 3% | 15,828.17 | 2,729.83 | 489,048.01 | 489,048.01 | | |
| Total production system | 18,663,613.10 | | 779,438.22 | 223,802.27 | 19,219,249.05 | | 590,968.64 | 358,719.49 | 19,451,498.20 | | | |
| Transmission system: | | | | | | | | | | | | |
| Equipment | 16,628,078.28 | 3½% | 100,598.87<br>844,990.69 | 156,788.06 | 17,416,879.78 | 3% | 731,771.43 | 25,378.02 | 18,123,273.19 | 18,123,273.19 | | |
| Leases and easements | 359,196.54 | 3½% | 18,825.52 | 104.52 | 377,917.54 | 3% | 16,458.98 | | 394,376.52 | 394,376.52 | | |
| Total transmission system | 16,987,274.82 | | 964,415.08 | 156,892.58 | 17,794,797.32 | | 748,230.41 | 25,378.02 | 18,517,649.71 | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distribution system: | | | | | | | | | | | | |
| Equipment | 1,165,152.03 | 3% | 80,038.65 | 10,897.25 | 1,234,293.43 | 3% | 81,737.72 | 18,043.52 | 1,297,987.63 | 1,297,987.63 | | |
| Leases and easements | 7,146.44 | 3% | 517.19 | 14.18 | 7,649.45 | 3% | 529.78 | | 8,179.23 | 8,179.23 | | |
| Total distribution system | 1,172,298.47 | | 80,555.84 | 10,911.43 | 1,241,942.88 | | 82,267.50 | 18,043.52 | 1,306,166.86 | | | |
| General property: | | | | | | | | | | | | |
| General structures | 89,824.01 | 3% | 2,651.68 | | 97,475.69 | 3% | 7,742.55 | | 105,218.24 | 105,218.24 | | |
| Office equipment | 196,255.29 | 5% | 11,641.96 | 3,915.33 | 203,981.92 | 5% | 11,875.66 | 1,487.94 | 214,369.64 | 214,369.64 | | |
| Drilling and cleaning equipment | 351,660.92 | 5% | | 16,068.52 | 335,592.40 | 5% | | 31,596.03 | 303,996.37 | 303,996.37 | | |
| Other | 338,636.46 | 5% | | 1,662.52 | 336,973.94 | 2% | 9,020.02 | 3,846.95 | 342,147.01 | 342,147.01 | | |
| Teaming | 50,859.39 | 12½% | | 5,643.21 | 45,216.18 | 5% | 3,177.63 | 6,372.83 | 42,020.98 | 42,020.98 | | |
| Telephone and telegraph lines | 244,521.06 | 5% | | 171.89 | 244,349.17 | 5% | | 211.43 | 244,137.74 | 244,137.74 | | |
| Autos and trucks | 87,574.35 | 25% | 26,191.45 | 16,540.77 | 97,225.03 | 25% | 21,873.94 | 16,556.41 | 102,542.56 | 102,542.56 | | |
| Total general property | 1,359,331.48 | | 45,485.09 | 44,002.24 | 1,360,814.33 | | 53,689.80 | 60,071.59 | 1,354,432.54 | | | |
| Cost of abandoning | 2,316.58 | (1) | 73,000.00 | 72,848.07 | 2,468.51 | (1) | 82,700.00 | 82,166.93 | 3,001.58 | 3,001.58 | | |
| Contracts for gas | | | | | | Depletion | 813.44 | | 813.44 | | 251 | 813.44 |
| Surplus property available for sale | 67,193.85 | 5% | 6,631.20 | | 73,825.05 | 5% | 6,631.20 | | 80,456.25 | | 253 | 80,456.25 |
| Patents, rights, and licenses | | | | | | | 6,611.56 | 6,611.56 | | | | |
| Miscellaneous—Clarksburg Light & Heat Co | 35,950.46 | 5% | 4,740.72 | | 40,691.18 | 5% | 4,740.72 | | 45,431.90 | | 258-6 | 45,431.90 |
| Total | 38,287,978.76 | | 1,954,266.15 | 508,456.59 | 39,733,788.32 | | 1,576,653.27 | 550,991.11 | 40,759,450.48 | 39,912,414.89 | | 847,035.59 |

[1] To transfer portion of reserve from reserve for other field investment to reserve for equipment—Transmission system, to correspond with transfer of investment between these accounts.

[2] Estimated cost of abandoning expense for the year.

[3] Reserves acquired.

*Italic figures denote decrease.*

HOPE NATURAL GAS COMPANY

Schedule No. 7

*Total loss on property retired, per books, as reclassified by the Company by years 1898 to 1938, inclusive, showing examiners' adjustments as at Dec. 31, 1938, from original cost study*

| Account | Total 1898–1938 per books reclassified | Examiners' adjustments | Total charges to adjusted depreciation and depletion reserves | Reference to— Examiners' schedule No. column | Reference to— Company exhibit No. 24 table | Remarks |
|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| Production plant: | | | | | | |
| Rights-of-way and field line labor | $482,530.31 | $212,486.61 | $695,016.92 | 2 (d) | H | |
| Operated acreage | 392,472.93 | *252,758.18* | 139,720.75 | 2 (c) | | |
| Gas well construction | 774,448.31 | 32,149.52 | 806,597.83 | 2 (e) | | |
| Structures | 30,939.04 | 35,328.29 | 66,267.33 | 3 (c) | G | |
| Field line material, measuring, and regulating station equipment | 608,958.79 | 190,741.68 | 799,700.47 | 3 (d) | H | |
| Gas well equipment | 1,071,901.50 | 169,421.67 | 1,241,323.17 | 3 (e) | | |
| Drilling and cleaning equipment | 234,811.04 | *47,658.58* | *47,658.58* | 3 (f) | | |
| Total | 3,596,061.92 | 339,717.21 | 3,700,968.09 | | | |
| Transmission plant: | | | | | | |
| Rights-of-way and main line labor | 181,331.43 | 301,197.24 | 482,528.67 | 4 (c) | J | |
| Structures | 127,049.06 | 285,508.72 | 412,557.78 | 4 (d) | I | |
| Main line material, measuring and regulating station equipment | 318,886.82 | 87,498.90 | 406,385.72 | 4 (e) | J | |
| Compressor stations | 506,639.90 | 419,336.11 | 925,976.01 | 4 (f) | K | |
| Total | 1,133,907.21 | 1,093,540.97 | 2,227,448.18 | | | |
| General plant: | | | | | | |
| Structures and improvements | 3,522.81 | 5,489.65 | 9,012.46 | 5 (c) | L | |
| Office furniture and equipment | 55,023.13 | 61,305.98 | 116,329.11 | 5 (d) | M | |
| Other equipment | 60,752.89 | 173,353.73 | 234,106.62 | 5 (e) | N | |
| Telephone and telegraph system | *6,247.49* | 13,456.82 | 7,209.33 | 5 (f) | | |

200

| | | | | | | |
|---|---|---|---|---|---|---|
| Teaming [2] | 168,805.54 | | | 5 | (g) | |
| Autos and trucks [2] | 424,224.14 | *2,808.65* | *2,608.65* | 5 | (g) | |
| Total | 706,081.02 | 250,997.53 | 364,048.87 | | | |
| Total production, transmission and general (schedule 1, line 53) | 5,436,050.15 | 1,684,255.71 | 6,292,465.14 | | | |
| Reconciliation to Exhibit 24, table B, column 2: | | | | | | |
| Deduct retirement losses on: | | | | | | |
| Gas well construction | 774,448.31 | | | | | |
| Gas well equipment | 1,071,901.50 | | | | | |
| Operated acreage | 392,472.93 | | | | | |
| Drilling and cleaning equipment | 234,811.04 | | | | | |
| Telephone and telegraph system | *6,247.49* | | | | | |
| Teaming | 168,805.54 | | | | | |
| Autos and trucks | 424,224.14 | | | | | |
| Total of above | 3,060,415.97 | | | | | |
| Total per Exhibit 24, table B, column 2 | 2,375,634.18 | | | | | |

[1] In order to set up retired gas wells by production areas the examiners went through the gas well ledgers, listing the capitalized construction cost of each retired well which resulted in the amount of $806,597.83.

[2] Depreciation reserve not adjusted for teaming, autos and trucks, drilling and cleaning equipment. The retirements, per books, are not shown on the examiners' schedules for these items, hence the total retirement losses amount to $7,120,305.86 as follows:

| | |
|---|---|
| Total, column (d) | $6,292,465.14 |
| Drilling and cleaning equipment | 234,811.04 |
| Teaming | 168,805.54 |
| Autos and trucks | 424,224.14 |
| Total | 7,120,305.86 |

[3] The total loss on property retired from 1898 to 1938 shows a credit of $6,247.49, as a result of a credit made to the depreciation reserve on voucher A-168, 1921, in the amount of $13,465.82 for an adjustment of telephone lines. It is the opinion of the examiners that the costs adjusted by voucher A-168 were originally charged to maintenance rather than to plant, and, consequently, the adjustment should be a credit to surplus rather than the depreciation reserve.

Italic figures denote decrease.

. [Pages 39 to 40 omitted.]

## EXHIBIT NO. 89.—ESTIMATED COST OF ABANDONING, F. P. C. WITNESS DUNN

| Property classification | Gross retirement | Deferred retirement | Total retirements | Cost of abandoning | |
|---|---|---|---|---|---|
| | | | | Rate | Amount |
| Production system structures | $48,044.83 | $35,328.29 | $83,373.12 | 10 | $8,337.31 |
| Field-line material | 3,274,139.73 | 190,791.68 | 3,464,881.41 | 19.67 | 681,542.17 |
| Gas-well equipment | | | | | |
| Transmission right-of-way and labor transmission structures | 167,300.23 | 285,508.72 | 452,808.95 | 10 | 45,280.90 |
| Transmission main maintenance, M. & R. station equipment | 960,958.06 | 87,498.90 | 1,048,456.96 | 19.97 | 209,376.85 |
| Compressor station equipment | 1,711,819.61 | 419,336.11 | 2,131,155.72 | 10 | 213,115.57 |
| General structures | 3,600.81 | 5,489.65 | 9,090.46 | 10 | 909.05 |
| Communication equipment | 41,477.54 | | 41,477.54 | 10 | 4,147.75 |
| | 6,207,340.81 | 1,023,903.35 | 7,231,244.16 | | 1,162,709.67 |

## EXHIBIT NO. 124.—COMPARISON OF COMPANY'S AND F. P. C. EXAMINERS' CLAIMS AS TO COST OF PRODUCTION, TRANSMISSION, AND GENERAL PLANT AS OF DEC. 31, 1938, HOPE WITNESS SULLIVAN

| Account No. | Description | Company's reproduction cost (from exhibits 16, 21, 22, 36, 37, 38, and 39) | | | Company's original cost (from exhibit 20) | Company's original cost trended to 1938 prices (from exhibit 29) | F. P. C. examiners' adjusted book cost (from exhibits 57, 61, 62, and 90) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | New | Percent condition | Less depreciation | | | Adjusted book cost | Net book cost | |
| | | | | | | | | Percent of adjusted book cost | Amount |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| | Natural gas production plant: | | | | | | | | |
| 330-1 | Natural gas producing lands | $2,275 | 100.0 | $2,275 | $2,370 | $2,370 | $3,320 | 100.0 | $3,320 |
| 330-2 | Natural gas producing leaseholds: | | | | | | | | |
| | Operated acreage | 1,684,636 | 28.6 | 482,311 | 1,684,636 | 1,684,636 | 1,599,005 | 39.3 | 628,166 |
| | Unoperated acreage | 681,882 | 100.0 | 681,882 | 681,882 | 681,882 | [1] 584,382 | 100.0 | [1] 584,382 |
| 330-5 | Other land and land rights | 21,045 | 100.0 | 21,045 | 22,126 | 23,126 | 21,008 | 100.0 | 21,008 |
| | Production structures: | | | | | | | | |
| 331-1 | Gas well structures | 11,912 | 56.0 | 6,671 | | | | | |
| 331-2 | Field measuring and regulating station structures | 58,222 | 51.0 | 29,693 | 40,773 | 41,799 | 21,139 | 56.1 | 119,017 |
| 331-3 | Other production system structures | 374,267 | 57.0 | 213,332 | 291,872 | 348,145 | 191,189 | | |
| | Total production structures | 444,401 | 56.2 | 249,696 | 332,645 | 389,944 | 212,328 | 56.1 | 119,017 |
| | Gas wells: | | | | | | | | |
| 332-1 | Producing gas wells—well construction | 19,321,139 | 31.3 | 6,047,517 | 17,783,637 | 34,384,320 | 4,089,478 | 73.1 | 2,989,324 |
| 332-2 | Producing gas wells—well equipment | 10,874,199 | 56.4 | 6,133,048 | 8,168,192 | 10,663,983 | 7,610,510 | 42.4 | 3,227,807 |
| | Cost of abandoning wells | | | | | | | | *2,107,261* |
| | Total gas wells | 30,195,338 | 40.3 | *12,180,565* | 25,951,829 | 45,048,303 | 11,699,988 | 35.1 | 4,109,870 |

[1] F. P. C. Exhibit No. 90 includes "6% interest on unoperated acreage" applied to this amount in examiners' rate adjustments.

Italic figures denote decrease.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field line right of way and construction costs: | | | | | | | | |
| 330-4 | Rights of way | 772,814 | 100.0 | 772,814 | 701,556 | 701,556 | 645,391 | 43.0 | 1,833,754 |
| 333-11 | Field lines—construction | 8,841,306 | 70.7 | 6,247,131 | 4,056,915 | 7,010,622 | 3,622,489 | | |
| | Total field line right of way and construction costs | 9,614,120 | 73.0 | 7,019,945 | 4,758,471 | 7,712,178 | 4,267,880 | 43.0 | 1,833,754 |
| | Field line material: | | | | | | | | |
| 333-12 | Field lines—equipment | 8,441,006 | 77.5 | 6,541,780 | 8,244,966 | 10,455,671 | 7,674,252 | | |
| 333-2 | Field measuring and regulating station equipment | 307,222 | 79.0 | 242,705 | 267,099 | 284,212 | 184,385 | 51.5 | 4,088,602 |
| 337 | Other production equipment | 112,910 | 72.0 | 81,295 | 89,102 | 105,335 | 75,532 | | |
| | Total field line material | 8,861,138 | 77.5 | 6,865,780 | 8,901,167 | 10,845,218 | 7,934,169 | 51.5 | 4,088,602 |
| 334 | Drilling and clearing equipment | 1,028,888 | 73.0 | 751,088 | 604,936 | 601,353 | 595,693 | 41.0 | 244,038 |
| | Total natural gas production plant | 52,533,723 | 53.78 | 28,254,587 | 42,640,062 | 66,988,016 | 26,917,773 | 43.2 | 11,632,157 |
| 2 | Transmission Plant: | | | | | | | | |
| 351-12 | Land | 155,842 | 100.0 | 155,842 | 164,105 | 164,105 | 162,912 | 100.0 | 162,912 |
| | Transmission structures: | | | | | | | | |
| 352-2 | Compressor station structures | 1,957,473 | 72.0 | 1,409,381 | 1,725,945 | 2,380,293 | 1,441,883 | | |
| 352-3 | Measuring and regulating station structures | 14,842 | 59.0 | 8,757 | 11,988 | 17,955 | 8,207 | 66.0 | 961,034 |
| 352-4 | Other transmission system structures | 12,507 | 70.0 | 8,755 | 11,509 | 12,865 | 6,776 | | |
| | Total transmission structures | 1,984,822 | 71.9 | 1,426,893 | 1,749,442 | 2,411,113 | 1,456,866 | 66.0 | 961,034 |
| | Transmission mains: | | | | | | | | |
| 351-23 | Rights-of-way | 554,352 | 100.0 | 554,352 | 442,394 | 442,394 | 391,243 | | |
| 353 | Mains | 16,500,288 | 79.0 | 13,035,228 | 15,180,596 | 22,581,997 | 14,132,075 | | |
| 354-3 | Measuring and regulating station equipment | 30,731 | 73.0 | 22,434 | 26,713 | 41,021 | 17,616 | 71.3 | 10,382,309 |
| 354-4 | Other transmission system equipment | 30,795 | 73.0 | 22,480 | 23,042 | 26,049 | 21,015 | | |
| | Total transmission mains | 17,116,166 | 79.7 | 13,634,494 | 15,672,745 | 23,091,461 | 14,561,949 | 71.3 | 10,382,309 |
| 354-2 | Compressor station equipment | 9,874,271 | 81.0 | 7,998,160 | 8,313,531 | 11,095,337 | 7,683,672 | 59.6 | 4,579,854 |
| | Total transmission plant | 29,131,101 | 79.69 | 23,215,389 | 25,899,823 | 36,762,016 | 23,865,399 | 67.40 | 16,086,109 |
| | General Plant: | | | | | | | | |
| 370 | Land and land rights | 75,018 | 100.0 | 75,018 | 98,188 | 98,188 | 96,981 | 100.0 | 96,175 |
| 371 | Structures and improvements | 297,298 | 73.0 | 217,028 | 274,427 | 306,129 | 225,888 | 70.5 | 159,981 |

## EXHIBIT NO. 124.—COMPARISON OF COMPANY'S AND F. P. C. EXAMINERS' CLAIMS AS TO COSTS OF PRODUCTION, TRANSMISSION, AND GENERAL PLANT AS OF DEC. 31, 1938, HOPE WITNESS SULLIVAN—CONTINUED

| Account No. | Description | Company's reproduction cost (from exhibits 16, 21, 22, 36, 37, 38, and 39) | | | Company's original cost (from exhibit 20) | Company's original cost trended to 1938 prices (from exhibit 20) | F. P. C. examiners' adjusted book cost (from exhibits 57, 61, 62, and 90) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | New | Percent condition | Less depreciation | | | Adjusted book cost | Net book cost | |
| | | | | | | | | Percent of adjusted book cost | Amount |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 372 | Office furniture and equipment | $210,047 | 70.0 | $147,033 | $195,911 | $217,548 | $178,684 | 64.5 | $115,200 |
| 373 | Transportation equipment | 166,990 | 56.0 | 93,514 | 148,540 | 151,163 | 142,314 | 26.1 | 37,163 |
| 378 | Communication equipment | 419,860 | 68.0 | 285,505 | 347,639 | 394,638 | 248,976 | 28.2 | 70,244 |
| | Other equipment: | | | | | | | | |
| 374 | Stores equipment | 10,304 | 75.0 | 7,728 | 9,466 | 10,514 | 5,107 | | |
| 375 | Shop equipment | 189,110 | 77.0 | 145,615 | 114,706 | 166,830 | 104,185 | | |
| 376 | Laboratory equipment | 3,971 | 85.0 | 3,375 | 1,070 | 1,070 | 1,093 | 80.7 | 93,618 |
| 377 | Tools and work equipment | 5,365 | 85.0 | 4,560 | 4,634 | 4,634 | 4,545 | | |
| 379 | Miscellaneous equipment | 1,488 | 75.0 | 1,116 | 1,172 | 1,172 | 1,148 | | |
| | Total other equipment | 210,238 | 77.2 | 162,394 | 131,048 | 184,220 | 115,988 | 80.7 | 93,618 |
| | Total general plant | 1,379,451 | 71.08 | 980,492 | 1,195,753 | 1,351,886 | 1,008,831 | 56.74 | 572,381 |
| | Undistributed construction costs | 14,296,099 | 76.34 | 10,913,139 | (Incl. Above) | (Incl. Above) | | | |
| | Total exclusive of working capital | 97,340,374 | 65.09 | 63,363,607 | 69,735,638 | 105,101,912 | 51,792,003 | 54.62 | 28,290,647 |
| | Working capital including materials and supplies | 2,997,230 | | 2,997,230 | 2,997,230 | 2,997,230 | 2,100,000 | | 2,100,000 |
| | Total | 100,337,604 | 66.14 | 66,360,837 | 72,732,868 | 108,099,142 | 53,892,003 | 56.39 | 30,390,647 |

## EXHIBIT NO. 142.—COMPARISON OF DEPRECIATION AND RETURN RESULTING FROM RHODES AND FRENCH DEPRECIATION RATES, F. P. C. WITNESS DUNN

| Classification | Original cost plant account balances at 12-31-38 | Average dollar years 1898–1938 | Rates of depreciation | | | Difference in net property | 6% return on difference in reserve balance | Difference in depreciation expense | Difference in expense and return |
|---|---|---|---|---|---|---|---|---|---|
| | | | French rate | Rhodes rate | Difference in rates | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| | | | *Percent* | *Percent* | *Percent* | | | | |
| Production plant: | | | | | | | | | |
| R-of-W and field line labor | $4,267,881.05 | $69,873,412.65 | Depl. | 2.04 | | | | | |
| Structures | 212,327.73 | 2,665,592.62 | 4.17 | 4.52 | (.35) | $(9,330) | $(560) | $743 | $183 |
| Field line material, M. & R. sta. equip | 7,934,169.06 | 174,092,406.61 | 2.22 | 2.04 | .18 | 313,366 | 18,802 | (14,282) | 4,520 |
| Operated acreage | 1,599,004.86 | 32,075,770.78 | Depl. | Depl. | | | | | |
| Gas well equipment | 7,610,509.75 | 202,418,225.61 | 2.50 | Depl. | | | | | |
| Gas well construction | 4,089,477.71 | 47,976,891.15 | Depl. | Depl. | | | | | |
| Drill and cleaning equip | 595,692.71 | 15,501,695.53 | | | | | | | |
| Total | 26,309,062.87 | | | | | | 18,242 | (13,539) | 4,703 |
| Transmission plant: | | | | | | | | | |
| R-of-Way and main line labor | 5,696,738.68 | 114,714,564.66 | 1.56 | 1.28 | .28 | 321,201 | 19,272 | (14,271) | 5,001 |
| Structures | 1,456,865.28 | 31,436,895.95 | 2.50 | 2.64 | (.14) | (44,012) | (2,641) | 2,040 | (601) |
| Mains material, M. & R. sta. equip | 9,465,210.19 | 207,037,410.48 | 1.56 | 1.28 | .28 | 579,705 | 34,782 | (26,503) | 8,279 |
| Compressor sta. equip | 7,083,671.99 | 140,328,446.29 | 2.56 | 1.76 | .80 | 1,122,628 | 67,358 | (61,469) | 5,889 |
| Total | 23,702,486.14 | 493,517,317.38 | | | | | 118,771 | (100,203) | 18,568 |

## EXHIBIT NO. 142.—COMPARISON OF DEPRECIATION AND RETURN RESULTING FROM RHODES AND FRENCH DEPRECIATION RATES, F. P. C. WITNESS DUNN—Continued

| Classification | Original cost plant account balances at 12-31-38 | Average dollar years 1898–1938 | Rates of depreciation | | | Difference in net property | 6% return on difference in reserve balance | Difference in depreciation expense | Difference in expense and return |
|---|---|---|---|---|---|---|---|---|---|
| | | | French rate | Rhodes rate | Difference in rates | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| | | | *Percent* | *Percent* | *Percent* | | | | |
| General: | | | | | | | | | |
| Structures and improvements | $225,887.78 | $2,854,735.82 | [1] 2.31 | 2.59 | (.28) | $(7,993) | $(480) | $632 | $152 |
| Office furniture and equip | 178,683.34 | 4,165,073.61 | 4.00 | 3.41 | .59 | 24,574 | 1,474 | (1,054) | 420 |
| Other equipment | 115,988.50 | 6,879,956.99 | 3.67 | 3.29 | .38 | 19,264 | 1,156 | (325) | 831 |
| Communication equip | 248,975.74 | 4,735,229.42 | 3.85 | 4.00 | (.15) | (7,103) | (426) | 373 | (53) |
| Teaming | | | | | | | | | |
| Autos and trucks | 142,314.49 | 2,820,649.96 | | | | | | | |
| Total | 911,849.85 | | | | | | 1,724 | (374) | 1,350 |
| Grand total | 50,923,398.86 | | | | | 2,312,300 | 138,737 | (114,116) | 24,621 |

[1] $\frac{65,865.30}{2,854,736}$ = 2.31 percent average annual rate.

Sources of figures:
Column (b), Exhibit 76, page 6, Column (b).
Column (c), Examiners' work papers supporting Exhibit 61.
Column (d), Exhibit 65, pages 36, 37, and 38.
Column (e), Exhibit 24, Table A, page 19.

Explanations:
Figures in () in Column (g) indicate lower rate due to increase in reserve balance.
Figures in () in Column (h) indicate amount available for reduction due to decrease in rate base at 6 percent rate of return.
Figures out of () in Column (i) indicate increase in expense due to increase in depreciation rate, and consequently a decrease in amount available for reduction.
Figures out of () in Column (j) indicate decrease in amount available for reduction due to all factors involved in change of depreciation rate.

HOPE NATURAL GAS COMPANY

*Comparison of depletion and return—Operated leaseholds*

| Line No. | Operated leaseholds (a) | F. P. C. examiners' accounting method (b) | Rhodes' percent condition method (c) | Increased cost as recommended by F. P. C. examiners (d) |
|---|---|---|---|---|
| 1 | Original cost as at Dec. 31, 1938 | $1,599,005 | $1,684,636 | |
| 2 | Accrued depletion as at Dec. 31, 1938 | 970,839 | 1,202,325 | |
| 3 | Net original cost as at Dec. 31, 1938 | 628,166 | 482,311 | $145,855 |
| 4 | 6% return on net original cost | 37,690 | 28,939 | 8,751 |
| 5 | Depletion expense—average 1937-40 | 41,492 | 26,069 | 15,423 |
| 6 | Amount of depletion and return | 79,182 | 55,008 | 24,174 |

Source of figures:

| | Exhibit | Page |
|---|---|---|
| Line 1, column (b) | 61 | 25 |
| Line 1, column (c) | 37 | 50 |
| Line 2, column (b) | 61 | 25 |
| Line 2, column (c) | Line 1 minus line 3. | |
| Line 3, column (b) | 61 | 25 |
| Line 3, column (c) | 37 | 46 |
| Line 5, column (b) | 78 | 54 |
| Line 5, column (c) | 126 | 1 |

1 **EXHIBIT NO. 118.—ESTIMATED CAPITAL EXPENDITURES FOR PRODUCTION SYSTEM, TRANSMISSION SYSTEM, AND GENERAL PLANT DURING THE YEARS 1941–1943, INCLUSIVE, HOPE WITNESS TONKIN**

*Summary of estimated capital expenditures for production system, transmission system, and general plant during years 1941 to 1943, inclusive*

| Item | 1941 | 1942 | 1943 | Total 1941-43 |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| Production system | 1,479,000 | 1,745,000 | 1,435,000 | 4,659,000 |
| Transmission system | 1,394,500 | 785,000 | 1,803,000 | 3,982,500 |
| General plant | 100,000 | 105,000 | 110,000 | 315,000 |
| Total | 2,973,500 | 2,635,000 | 3,348,000 | 8,956,500 |

[Pages 2 to 4 omitted.]

## EXHIBIT NO. 62.—WORKING CAPITAL, F. P. C. WITNESS NICHOLS

### WRITTEN STATEMENT

#### I—Working Capital Requirements

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Natural Gas Company has been made, and, as a result, this report on the Working Capital requirements of the Company is submitted.

Schedule No. 1 is a summary of the working capital requirements, based on operating expenses as adjusted by the Examiners of Accounts for year 1939, plus an amount for a stock of Materials and Supplies, which results in total Working Capital as follows:

| | |
|---|---|
| Materials and supplies | $1,228,599 |
| Cash working capital, based on operating expenses as adjusted | 755,746 |
| Cash working capital, based on exploration and development costs exclusive of abandoned leases | 56,897 |
| Total working capital | 2,041,242 |

*Materials and Supplies.*—The allowance for Materials and Supplies in the amount of $1,228,599 is based on the following:

| | | |
|---|---|---|
| Materials and supplies total per books as of Dec. 31, 1939 | | $1,501,806.53 |
| Less materials for resale | | 16,092.34 |
| Balance warehouse materials | | 1,485,714.19 |
| Average monthly balance, 1939 | | 1,435,599.00 |
| Less the following items approximated from Company's Exhibit No. 37: | | |
| Distribution materials and supplies | $75,000.00 | |
| Oil production materials and supplies | 95,000.00 | |
| Value in excess of salvage on nonusable materials | 37,000.00 | |
| | | 207,000.00 |
| Balance included in working capital | | 1,228,599.00 |

The gross issues of Materials and Supplies during the year 1939 amounted to $887,933.67, which indicates that the stock on hand as of December 31, 1939, was sufficient, on the average, to meet the requirements of the Company for a period of approximately 1 year and 8 months, without taking into consideration the materials and supplies that were returned to stock for salvage, etc.

The following table shows the extent to which the Materials and Supplies were issued during 1939 for various purposes:

TABLE No. 1

| Account | Amount | Percent of total |
|---|---|---|
| Miscellaneous gas revenues | $5,784.31 | .65 |
| Operating expenses: | | |
| Production operation | 21,658.99 | 2.44 |
| Production maintenance | 34,669.91 | 3.90 |
| Purchased gas expense | 4,217.46 | .48 |
| Transmission operation | 43,014.68 | 4.84 |
| Transmission maintenance | 44,491.50 | 5.01 |
| Distribution expense | 11,075.08 | 1.25 |
| General expense | 1,462.08 | .16 |
| Total operating expense | 160,589.70 | 18.08 |
| 3 Clearing accounts | 81,912.81 | 9.23 |
| Construction work in progress | 344,206.18 | 38.76 |
| Retirement work in progress | 122,579.97 | 13.81 |
| Other work in progress | 18,958.81 | 2.14 |
| Cost of merchandise and jobbing | 1,527.46 | .17 |
| Deferred debits and suspense | 2,384.33 | .27 |
| Accounts receivable: | | |
| Associated companies | 130,893.90 | 14.74 |
| Other | 19,058.79 | 2.15 |
| Expense of nonutility operations | 36.41 | |
| Total (gross issues) | 887,933.67 | 100.00 |

Of the amount issued to Associated Companies, Hope Construction and Refining Company received $92,261.88 and Reserve Gas Company received $33,854.42. River Gas Company received $4,655.41 and the balance of $122.19 was issued to miscellaneous companies,

The allocation to Production and Transmission of the amount included in Working Capital for Materials and Supplies as shown in Schedule No. 1, Columns (g) and (h), is based on the ratio of the amount of materials and supplies used during the year 1939 for Production and Transmission expenses to the total materials and supplies charged to operating expenses, exclusive of Distribution expenses. This is illustrated by the following details:

| Materials and supplies issued (Table 1) | | Percent of total | Working capital allocation (Schedule 1) |
|---|---|---|---|
| Production operation | $21,658.99 | | |
| Production maintenance | 34,669.91 | | |
| Purchased gas | 4,217.46 | | |
| Total production | 60,546.36 | 40.9 | $502,497 |
| Transmission operation | 43,014.68 | | |
| Transmission maintenance | 44,491.50 | | |
| Total transmission | 87,506.18 | 59.1 | 726,102 |
| Total production and transmission | 148,052.54 | 100.00 | 1,228,599 |

4 It will be noted by reference to Table No. 1 above, that nearly 15% of the total issues during 1939 represented sales of material to associated companies, which includes the amount, of approximately $92,000 issued to Hope Construction and Refining Company, chiefly for oil operations. Relatively, this would indicate that about 15% of the materials and supplies on hand as of December 31, 1939, or about $215,000 is held for the benefit of associated companies. However, the only amount deducted for such items is $95,000, as shown in the footnote of Schedule No. 1, indicatd as "Oil Production Materials and Supplies."

5. *Operating Revenue Deductions.* The Operating Revenue Deductions are shown in Schedule No. 1 per Company books exclusive of Depreciation and Depletion. Examiners' adjustments have been applied to the book amounts and the resulting adjusted total is $13,160,959.35. The adjusted Administrative and General Expenses amounting to $808,908 have been allocated for the purpose of this report to Production, Transmission and Distribution Expenses in the manner shown by Schedule No. 2. The allocations are on various bases as described in the schedule, the most of which, it will be noted, are on the basis of all direct charges prior to the allocation.

Certain items have been eliminated from the Operating Revenue Deductions, or given special treatment in this report for various reasons, each of which will be separately commented upon in the order in which they appear in Schedule No. 1, as follows:

*Taxes.*—No allowance of cash working capital has been made to provide for the payment of taxes, because all taxes were paid long after the receipt of revenues. Table 2, which follows, shows the accumulation of tax accruals per books during the year 1939

and the accumulated payments of tax assessments. This table shows a range of accruals in excess of the payments from approximately $96,000 to over $761,000. The latter represents the balance at December 31, 1939, and the former at January 31, 1939:

6 TABLE No. 2

[Accumulated to End of Month]

| Month | Accruals | Payments | Balance |
|---|---|---|---|
| January | $95,817.83 | | $95,817.83 |
| February | 191,635.66 | $6,004.82 | 185,630.84 |
| March | 287,453.49 | 12,085.92 | 275,367.57 |
| April | 383,271.32 | 124,807.17 | 258,464.15 |
| May | 479,089.15 | 130,862.43 | 348,226.72 |
| June | 668,885.51 | 147,134.61 | 521,750.90 |
| July | 783,890.27 | 228,460.21 | 555,430.06 |
| August | 898,895.03 | 249,372.41 | 649,522.62 |
| September | 1,013,899.72 | 256,327.08 | 757,572.71 |
| October | 1,157,890.92 | 704,569.59 | 453,321.33 |
| November | 1,301,882.05 | 711,560.98 | 590,321.07 |
| December | 1,479,703.93 | 718,524.79 | 761,179.14 |

The foregoing table does not take into consideration the accumulation of tax accruals in excess of payments as of January 1, 1939, which amounted to $476,586.38. The bulk of this balance represented West Virginia property taxes for the last half of the year 1938, which were not paid until April, 1939. Thus, in addition to the amounts shown in the table, the Company had funds during the months of January to March, inclusive, that had been accumulated for tax purposes, amounting to approximately $475,000.

The difference between the accumulated accruals as of December 31, 1939 ($1,479,703.93) as shown in Table No. 2, above and the amount of taxes charged to Operating Revenue Deductions, per books ($1,436,731.75) represents social security taxes charged to Work in Progress, Accounts Receivable, etc.

*Gas Well Royalties.*—The Gas Well Royalties are given special treatment for the purpose of this report, inasmuch as they are practically all paid in advance for periods varying from three months to one year.

7 The Royalty account was examined for the purpose of segregating the amounts thereof that were paid monthly, quarterly, semi-annually and annually. Following is Table No. 3 which shows the amounts so segregated, and while it does not purport to be accurately distributed to the last dollar, it is considered

by the Examiners of Accounts to be sufficiently accurate for the purpose intended:

TABLE No. 3

[Periods Paid]

| | Monthly not in advance | In advance | | |
|---|---|---|---|---|
| | | Quarterly | Semi-annually | Annually |
| Gas well royalties, paid as gas well rental | | $513,865.82 | $3,587.50 | $224,589.80 |
| Royalties paid on the basis of production | 11,794.56 | | | |
| Sundry cash payments | | 14,749.28 | | |
| Checks returned | | (12,759.61) | | |
| Sundry transfers and credits | | (6,250.52) | | |
| Sundry charges | 118.90 | 509.31 | | |
| Rentals due in 1939, but payment deferred | | 3,120.72 | | |
| Payments in lieu of drilling: | | | | |
| Unoperated acreage | | 52,742.60 | | 4,227.50 |
| Operated acreage | | 4,362.00 | 250.00 | 13,943.76 |
| Total | 11,913.46 | 570,339.60 | 3,837.50 | 242,761.06 |

Included in the "Sundry Charges" are certain items of gas in lieu of royalties. Although such expense items do not represent an expenditure of cash, the amount is negligible for the purpose of this report. It will also be noted that certain payments have been deferred, which fact was disregarded for the purpose of this report.

8 The provisions for cash working capital based on the above enumerated expenditures is as follows:

| Period | Amount | Working capital | Proportion of working capital to total |
|---|---|---|---|
| Monthly, not in advance | $11,913.46 | $992.79 | 8.33% |
| Quarterly, in advance | 570,339.60 | 142,584.90 | 25.00% |
| Semiannually in advance | 3,837.50 | 1,918.75 | 50.00% |
| Annually in advance | 242,761.06 | 242,761.06 | 100.00% |
| Total | 828,851.62 | 388,257.50 | |

*Gas Used in Company Operations.*—The entire amount charged and credited to Operating Expenses for gas used in Company operations is eliminated because the cost of producing and transporting said gas is reflected in the various operating expenses. The credit slightly exceeds the charges for this item, the difference being rep-

resented by charges for gas to accounts other than operating e
penses. Some such charges were made to clearing accounts, a pa
of which would, in the ordinary course of the Company's
counting procedure, be transferred to the operating expens
However, the necessary mechanics of determining the exact amou
is not commensurate with the value of the results.

*Depreciation on transportation equipment, well tools, e
charged to operating expenses through clearing accounts.*—T
amount determined by the Examiners of Accounts for this elimi
tion is on an overall average basis, and was obtained after analy
of all clearing accounts. The percentage of the charges for dep
ciation to the total charges in each clearing account was applied
the various amounts that were cleared to operating expenses fr
said accounts. The result was the amount used to represent t
charges for depreciation included in operating expenses. T
amount eliminated ($23,344.27) represents a proportionate part
the following charges as developed in Table No. 4.

| | |
|---|---|
| 9 Depreciation on transportation equipment, charged direct to Account 903.1 Transportation, Expense, Clearing | $23,773 |
| Depreciation on shop equipment, charged direct to Account 903.2, Clarksburg Garage Shop, Clearing | 1,529 |
| Depreciation on drilling and cleaning equipment, charged direct to Account 908, Drilling and Cleaning Equipment, Clearing | 18,374 |
| Total | 43,677 |

Following is Table No. 4, which is a summary of the amoun
charged to operating expenses from each clearing account, and t
approximate amount of depreciation included therein:

TABLE No. 4

| Clearing account | Charges to operating exp. | Less use of hired autos | Balance | Depreciation include | |
|---|---|---|---|---|---|
| | | | | Percent | Amount |
| 902 | $8,012.37 | | $8,012.37 | 1.19 | $9 |
| 903.1 | 119,466.23 | $32,016.95 | 87,449.28 | 11.75 | 10,27 |
| 903.2 | 44.48 | | 44.48 | 6.80 | |
| 905.1 | 75,592.45 | | 75,592.45 | | |
| 905.2 | 22,885.99 | | 22,885.99 | 0.11 | 2 |
| 907.1 | 29,093.09 | | 29,093.09 | | |
| 907.2 | 14,674.23 | | 14,674.23 | | |
| 908 | 4,767.80 | | 4,767.80 | 43.28 | 2,06 |
| 909 | 148,663.89 | | 148,663.89 | 0.66 | 98 |
| 910 | 237,427.32 | | 237,427.32 | 4.17 | 9,90 |
| Total | 660,627.85 | 32,016.95 | 628,610.90 | | 23,34 |

The depreciation charged to clearing accounts other than 903.1, 903.2 and 908 are represented by amounts transferred to other clearing accounts from those to which the depreciation charges were originally made.

*Purchased Gas.*—No allowance for working capital has been made to provide for the purchase of gas because large sums are collected from associated utilities to which gas is sold, in advance of the date on which payments are made for the gas purchased. Payment for a comparatively small portion of gas purchased is due on the 10th of the month following the purchase and the balance is due on the 20th.

Two schedules are presented herein, being Schedules Nos. 3 and 4, to show respectively, the average lag in cash receipts from associated utilities for gas sales, and the average lag in payments for gas purchased. The lag is calculated, in each case from the 15th of the month during which gas was sold and purchased. These schedules show that there was, on the average, a period of 4 days between the receipt of an aggregate sum of $13,930,353.97 for gas sales to associated gas utilities, during 1939, and the payment of an aggregate amount of $7,632,030.69 (unadjusted) for gas purchased, during that year.

The Examiners of Accounts have no intention, by this elimination, to intimate that dollars are "tagged" for specific purposes. But a month to month study of the cash receipts from sales of gas to the associated utilities, as compared with the payments for gas purchased, shows that enough revenues were received from these sources alone to pay for gas purchased in advance of the date such payments were due, with substantial amounts in excess of the cash requirements therefor.

For the purpose of illustrating the foregoing facts, details are shown in Table No. 5 which follows. It will be noted that each month is shown independently with no balances carried over to the next month. The table shows the recorded dates the various cash items were received, the dates on which payments were made for gas purchased, and the excess of cash receipts over the cash disbursements during the month as of each date shown.

| Date 1939 | Cash receipts | | | Cash disbursements | Balance |
|---|---|---|---|---|---|
| | East Ohio Gas Co. | The Peoples Gas Co. | River Gas Co. | | |
| Feb. 10 | | -- | -- | $12,779.38 | $12,779.38 |
| 14 | $800,000.00 | | | | 787,220.62 |
| 16 | 400,000.00 | ---- | | | 1,187,220.62 |
| 20 | | $122,046.54 | | 741,742.86 | 567,524.30 |
| 21 | 109,060.47 | | | | 676,584.77 |
| 24 | | | $17,359.30 | | 693,944.07 |
| Mar. 10 | | | | 13,102.60 | 15,109.60 |
| 13 | 800,000.00 | | | | 785,897.40 |
| 20 | 200,000.00 | 163,397.85 | | 695,953.19 | 454,342.06 |
| 23 | | | 16,175.60 | | 470,517.66 |
| 24 | 287,947.38 | | | | 758,465.04 |
| Apr. 10 | 400,000.00 | | | 14,694.00 | 385,306.00 |
| 17 | 800,000.00 | | | | 1,185,306.00 |
| 20 | | 163,720.10 | | 735,760.86 | 613,265.24 |
| 21 | 90,867.82 | | | | 704,133.06 |
| 25 | | | 10,409.70 | | 714,542.76 |
| May 1 | 200,000.00 | | | | 200,000.00 |
| 10 | | | | 13,096.40 | 186,903.60 |
| 11 | 400,000.00 | | | | 586,903.60 |
| 15 | 400,000.00 | | | | 986,903.60 |
| 19 | | 99,350.02 | | | 1,086,253.62 |
| 20 | | | | 715,883.00 | 370,370.62 |
| 22 | 189,746.76 | | | | 560,136.78 |
| 24 | | | 7,937.65 | | 568,074.43 |
| June 5 | 200,000.00 | | | | 200,000.00 |
| 10 | | | | 13,388.55 | 186,611.45 |
| 15 | 700,000.00 | | | | 886,611.45 |
| 20 | | 115,573.54 | | 531,384.66 | 470,800.33 |
| 21 | 157,940.19 | | | | 628,740.52 |
| 23 | 1,390.40 | | | | 630,130.92 |
| July 10 | | | | 9,084.36 | 9,084.36 |
| 11 | 200,000.00 | | | | 190,915.64 |
| 17 | 500,000.00 | | | | 690,915.64 |
| 20 | 61,396.66 | 83,968.50 | | 463,057.84 | 373,222.96 |
| 24 | | | 99.25 | | 373,319.21 |
| Aug. 10 | | | | 9,474.30 | 9,474.30 |
| 14 | 500,000.00 | | | | 490,525.70 |
| 18 | 155,429.39 | | | | 645,955.09 |
| 19 | | | | 447,688.41 | 198,266.68 |
| 21 | | 72,338.81 | | | 270,605.49 |
| 23 | | | 389.55 | | 270,995.04 |
| 12 Sept. 9 | | | | $6,513.15 | $6,513.15 |
| 11 | $200,000.00 | | | | 193,486.85 |
| 18 | 300,000.00 | | | | 493,486.85 |
| 20 | | 77,730.37 | | 447,090.76 | 124,146.46 |
| 21 | 192,935.64 | | | | 317,082.10 |
| 26 | | | 442.05 | | 317,524.15 |
| Oct. 9 | 200,000.00 | | | | 200,000.00 |
| 10 | | | | 4,348.57 | 195,651.43 |
| 16 | 400,000.00 | | | | 595,651.43 |
| 19 | 128,184.85 | | | | 723,836.28 |
| 20 | | 144,687.28 | 593.95 | 446,969.80 | 382,147.71 |
| Nov. 6 | 200,000.00 | | | | 200,000.00 |
| 10 | | | | 8,276.61 | 191,723.39 |
| 13 | 300,000.00 | | | | 491,723.39 |
| 20 | 421,469.85 | 94,942.16 | | 517,606.80 | 490,528.60 |
| 22 | | | 3,206.35 | | 493,734.95 |

TABLE NO. 5—Continued

| Date 1939 | Cash receipts: East Ohio Gas Co. | Cash receipts: The Peoples Gas Co. | Cash receipts: River Gas Co. | Cash disbursements | Balance |
|---|---|---|---|---|---|
| Dec. 4 | $300,000.00 | | | | $300,000.00 |
| 9 | | | | $14,427.64 | 285,572.36 |
| 18 | 400,000.00 | | | | 685,572.36 |
| 20 | | $157,286.36 | | 769,702.68 | 73,156.04 |
| 21 | | | $8,773.80 | | 81,929.84 |
| 28 | 450,630.52 | | | | 532,560.36 |

Italic figures denote deficit.

The gas sales contracts with the three companies shown in the foregoing table provide for payment as follows:

The East Ohio Gas Company, 75% on or before the 15th of the month following the purchase; balance on the 27th.

The Peoples Natural Gas Co., On or before the 30th of the month following the purchases.

River Gas Company, 30th of the month following purchases.

Cash receipts as of the 20th of each month from sales to the three companies shown in the foregoing table are in excess
13 of the payments on the 20th of each month for gas purchased in amounts varying from $73,100 in December to $613,200 in April, with a monthly average of $375,500.

*Distribution Expenses.*—All direct Distribution Expenses plus an amount allocated from Administrative and General Expenses have been eliminated for the purpose of this report. It will be noted that the adjusted Distribution Expenses amount to $629,332.07 and that the amount eliminated under the caption "Distribution Expenses" is $625,722.52. The difference of $3,609.55 is included in the deductions under the two captions "Gas Used in Company Operations" and "Depreciation on Transportation Equipment, etc." Nothing has been eliminated to cover the cost of producing gas that was sold in West Virginia.

*Balance of Operating Expenses.*—The balance of Operating Expenses for the year 1939 after elimination of the various items for special treatment as noted is $2,939,902.26. This is shown in Schedule No. 1.

The sum of $367,488 has been included in the working capital to provide for this balance of operating expenses, which represents 12½ percent thereof, or the average amount required for a period of 45 days. This, in the opinion of the Examiners of Accounts, represents a liberal allowance to cover expenses, as

adjusted, which are to be paid in cash prior to the receipt of revenues.

*Provision for Exploration and Development Costs.*—The Exploration and Development Costs as adjusted by the
14 Examiners of Accounts amounted to $500,343.58 during the year 1939, as follows:

| *Item* | *Amount* |
|---|---|
| Delay rentals | $407,284.24 |
| Nonproductive well drilling | 47,895.17 |
| Cancelled and surrendered leases | 45,164.17 |
| Total | 500,343.58 |

Working Capital has been provided on the basis of 12½% (or an average of 45 days' operations) on the charges for Delay Rentals and Nonproductive Well Drilling, which amounted to an aggregate sum of $455,179.41 during the year 1939. The amount included for working capital is $56,897.

*Total Working Capital.*—The total working capital as shown by Schedule No. 1 is $2,041,242, which, in the opinion of the Examiners of Accounts, is a liberal amount to be allowed for the Company's requirements in its export business. In proposing this allowance for Working Capital, the Examiners of Accounts have taken into consideration the fact that the Company accumulates substantial cash funds through its Depreciation, Depletion and Tax accruals. It appears that these accruals would provide the Company with funds far in excess of any possible requirements for minimum bank balances.

The general cash funds of the Company, exclusive of its local collection depositories at the end of each month during the years 1939 and 1940, were as follows:

| Month | 1939 | 1940 |
|---|---|---|
| January | $170,892.74 | $921,084.17 |
| February | 470,283.37 | 321,951.87 |
| March | 186,685.57 | 287,048.49 |
| April | 134,093.52 | 506,108.80 |
| May | 137,618.31 | 209,954.17 |
| June | 63,679.24 | 280,220.35 |
| 15 July | 325,670.74 | 120,026.72 |
| August | 365,980.55 | 203,938.80 |
| September | 1,737,766.85 | 515,115.10 |
| October | 1,666,903.79 | 212,555.53 |
| November | 416,474.37 | 417,740.39 |
| December | 493,911.81 | 386,113.88 |

*Average Lag in Cash Receipts and Disbursements.*—Schedules Nos. 3 and 4 show the average lag in cash receipts from sales of gas to associated companies and the average lag in the payments for gas purchased. These schedules, which have previously been referred to, indicate that the average date on which the revenues were received is the 16th of the month (31 days' lag), following the rendition of services and the average payment date for gas purchases was the 20th of the month (35 days' lag).

Further studies were made for average dates of cash receipts and disbursements, which show the following statistics:

| *Item* | Average date [1] |
|---|---|
| Receipts from nonassociated gas companies | 21st |
| Receipts for gas sales in West Virginia | 15th |
| General cash disbursements for miscellaneous charges to operating expenses | 10th |
| Payrolls | 1st |

The average date as shown for general cash disbursements was determined by a study of several vouchers charged to operating expenses with an effort on the part of the Examiners of Accounts to examine a representative cross-section of vouchers paid during the year 1939.

16 II—Working Capital Per Company Books

The working capital according to the Company's books at December 31, 1937, 1938, and 1939, is shown in Schedule No. 5, which is summarized as follows:

| Date | Excess current assets over current liabilities | Temporary cash investments | Balance of available working capital |
|---|---|---|---|
| Dec. 31, 1937 | $15,747,240.60 | $14,511,245.26 | $1,235,995.34 |
| Dec. 31, 1938 | 13,389,356.53 | 11,555,577.21 | 1,933,759.32 |
| Dec. 31, 1939 | 13,404,772.74 | 11,909,891.95 | 1,494,880.79 |
| Average | 14,213,783.00 | 12,658,904.00 | 1,554,879.00 |

The temporary cash investments as shown in the above table are presented in detail in Schedule No. 5 and are represented chiefly by investments in United States Government Securities. It will be noted that the only change in the Company's holdings of such securities during 1938 was the disposal of $900,000 of 2½% Notes due in 1939 and practically the same amount ($921,796.88) in-

[1] Date of month following rendition or receipt of services.

vested in 2½% Bonds due in 1950–52. During 1939 the Company disposed of Government securities of a book value of $6,484,296.88 and invested $5,399,702.00 in additional Government securities. This resulted in a decrease of $1,084,594.88 in book value of investments of this class.

In addition to the investments in Government securities, the Company advanced various sums from time to time to Standard Oil Company of N. J., and the balance at the close of each of the three years above mentioned was as follows:

| | |
|---|---|
| Dec. 31, 1937 | $3,506,479.63 |
| Dec. 31, 1938 | 521,983.45 |
| Dec. 31, 1939 | 1,960,893.07 |

17 Interest was paid by Standard Oil Company of N. J. at the rate of ½% per annum on these advances during the year 1939. Interest rates for prior years were not investigated.

The advances during the year 1939 ranged in amounts from $200,000 to $1,500,000 with an aggregate total of $9,350,000. Withdrawals ranged from $100,000 to $650,000 during the year, plus $1,800,000 withdrawn on December 20, 1939. The total withdrawals during the year amounted to $7,925,224.79, which resulted in an increase in the amount of the advances as of December 31, 1939, over the amount at December 31, 1938, of $1,424,775.21, as compared with the decrease in investments in Government securities of $1,084,594.88. The average end-of-the-month balance of the advances was $2,879,875.08 during the year 1939.

The balance of the working capital per Company's books at December 31, 1939, exclusive of the investments in Government securities and the advances to Standard Oil Company of N. J. is $1,494,880.79 as shown above, which is represented, chiefly, by the following items:

| | |
|---|---|
| Cash and working funds | $548,043.19 |
| Accounts receivable | 2,276,214.51 |
| Materials and supplies | 1,501,806.53 |
| Total | 4,326,064.23 |
| Accounts payable | 2,024,630.90 |
| Taxes accrued | 750,830.19 |
| Customers' deposits | 95,423.21 |
| Total | 2,870,884.30 |
| Balance | $1,455,179.93 |

18 *Source and Disposition of Funds.*—Schedules Nos. 6 and 7 are presented to show respectively the various changes in the assets and liabilities during the year 1939 and the sources from which cash funds were received and the disposition thereof during that year. Schedule No. 6 shows the current assets and current liabilities in detail as of December 31, 1938, and 1939, prior to the merger of Reserve Gas Company and the increase or decrease in each account during the year 1939. It also shows comparable balance sheet data as of the latter date after the merger.

Schedule No. 7 shows that net cash funds received from all sources amounted to $3,817,582.33 plus a reduction of working capital of $84,563.79 or a total of funds provided amounting to $3,902,146.02.

These funds were used chiefly for:

| | |
|---|---|
| Plant additions (gross) | $945,980.05 |
| Dividends on Common Stock | 2,796,930.00 |
| Total | 3,742,910.05 |

Clarksburg, West Virginia. *March 13, 1944.*

SAMUEL I. NICHOLS,
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*Senior Examiner of Accounts.*

EDWARD L. DUNN,
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*Chief, Bureau of Accounts, Finance and Rates.*

[Pages 19 to 26 omitted.]

1 **EXHIBIT NO. 67.—COMPARATIVE INCOME STATEMENTS FOR THE YEARS 1937, 1938, AND 1939, VOLUME I, F. P. C. WITNESSES NICHOLS AND REINHARD**

## WRITTEN STATEMENT

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices, or contracts of the Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Natural Gas Company has been made, and as a result, this report on the determination of income is submitted.

*General.*

This exhibit presents a comparative income statement for the years 1937, 1938, and 1939 as adjusted by the examiners.

The report is in two parts. Volume I sets forth the income statement per books, reclassified, and as adjusted, with supporting and detailed schedules. Volume II contains the adjusting entries, and summaries, prepared by several Examiners of Accounts.

The schedules and adjustments concerning the revenues and taxes have been prepared by Mr. Nichols. The schedules and adjustments concerning operating expenses have been prepared by Mr. Reinhard. In order to present, in this exhibit, a complete reference to all adjustments necessary in the determination of income, adjustments prepared by other examiners are included. In each such instance, the explanation of the adjustment indicates the source; therefore, the details and testimony will be set forth under the other exhibits referred to.

*Reclassification.*

During the year 1939 Hope Natural Gas Company used an accounting classification in accord with the present Uniform
2 System of Accounts. To present a comparison for the three years by the detail accounts and amounts, the examiners have reclassified 1937 and 1938 substantially in accordance with the 1939 accounts, without, in any manner, changing the net

operating income comparable to the 1939 classification or net income transferred to surplus. The result of the reclassification is shown in Schedule 1, columns (c) and (g), entitled "Per Books, Reclassified." The reclassification is shown in account detail by Examiners' Entries No. 251 covering Gas Service Revenues, No. 252 covering Other Gas Revenues, No. 253 covering Operating Expenses, No. 254 and 256 covering Other Income and No. 255 covering Gross Income Deductions. The manner in which the reclassification entries are prepared and referenced to the book accounts, obviates the necessity for setting up a detailed income statement for the years 1937 and 1938, by the old account descriptions and amounts.

*Description of Schedules.*

Schedule No. 1 is a Comparative Income Statement, Reclassified for the years 1937 and 1938, showing adjustments made thereto for the years 1937, 1938, and 1939. This schedule sets forth, in condensed form, the amounts as recorded on the books of the Company, reclassified to conform to the 1939 Classification of Accounts as prescribed by the Federal Power Commission, the examiners' adjustments made thereto and the resulting amounts after application of the adjustments.

Attention is directed to the Net Utility Income per books, (columns (c), (g), and (k)) and as adjusted (columns (f), (j), and (n)) for the respective years covered in this report.

It will be noted that an increase develops in each year, which is accounted for and described as follows:

| Particulars | Net utility income | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| As adjusted | $3,565,310.34 | ($1,149,759.00) | $3,304,956.69 |
| Per books | 2,364,424.40 | 884,341.41 | 2,283,368.05 |
| Increase | 1,200,885.94 | (585,417.59) | 1,021,588.64 |

These increases are accounted for by a decrease in Operating Revenues, Operating Revenue Deductions, setting up Nonrecurring Expenses and Decrease in Exploration and Development Costs for years 1937 and 1938 and an increase in the year 1939. These groups of accounts are treated separately in the schedules dealing with detailed revenues, expenses and exploration and development costs that follow in this report, and are summarized below:

| Particulars | Examiners' adjustments—Increase or (decrease)* | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| Operating revenues | *$1,479,959.52* | *$750,618.48* | *$458,122.88* |
| Operating revenue deductions | *2,608,409.31* | *1,306,775.37* | *1,624,152.62* |
| Nonrecurring expenses | *45,285.56* | *51,120.43* | *69,256.90* |
| Exploration and development costs | *117,721.71* | *60,385.13* | *45,164.20* |
| Increase in net utility income | 1,200,485.94 | 585,417.59 | 1,021,588.64 |

* Italic figures denote decrease.

The increases arising from examiners' adjustments in net Income Transferred to Surplus, amounting to $861,294.20 in 1937, $300,929.98 in 1938, and $734,354.92 in 1939 are summarized in Schedule No. 1A.

4 *Gas Service Revenues.*

Schedule No. 4 (sheets 1, 2, and 3) shows the gas service revenues per books and as adjusted by the Examiners of Accounts for the years 1939, 1938, and 1937, respectively.

In order that the years 1937 and 1938 may be reasonably comparable with the year 1939, the book figures have been reclassified as shown in columns (c), (d), (e), and (f) of Schedule No. 4, sheets 2 and 3.

In addition to the dollar amount of the gas sales, the schedule shows the number of accounts at December 31 of each of the three years, the volume on the sales contract basis and the average rate per Mcf. These data were taken from the Company's Analysis of Gas Earnings.

A summary of the total gas service revenues, as adjusted, showing the amount of sales in the State of West Virginia and those outside the state is shown in the following table:

| Year | Total adjusted gas service revenues | Sales in West Virginia | Sales outside West Virginia |
|---|---|---|---|
| 1937 | $19,238,569.64 | $3,427,958.68 | $15,810,610.96 |
| 1938 | 16,513,210.81 | 2,736,147.17 | 13,777,063.64 |
| 1939 | 17,898,970.74 | 3,032,076.63 | 14,866,894.11 |

The above data expressed in percentages to total sales are as follows:

| Year | Total adjusted gas service revenues | Sales in West Virginia | Sales outside West Virginia |
|---|---|---|---|
| | *Percent* | *Percent* | *Percent* |
| 1937 | 100 | 17.8 | 82.2 |
| 1938 | 100 | 16.6 | 83.4 |
| 1939 | 100 | 16.8 | 83.1 |

5 The sales outside the State of West Virginia were to the following companies as shown in Schedule No. 4:

Fayette County Gas Company.
The Manufacturers Light & Heat Company.
The East Ohio Gas Company.
The Peoples Natural Gas Company.
The River Gas Company.

The first two companies in the above list are not associated with Hope Natural Gas Company; the remaining three companies are affiliated.

The examiners' adjustments to Gas Service Revenues comprise the following:

1939: Elimination of gas sales to Northwestern Ohio Natural Gas Company on December 30 and 31, 1939.

All years; (a) Elimination of refund to The Peoples Natural Gas Company for compressing gas from revenues and from compressor station expense.

(b) Elimination of the value of exchange gas delivered to Hope Construction and Refining Company.

(c) Elimination of transaction with Hope Construction and Refining Company for operation of gasoline plants as set forth in a separate study. For the purpose of this report, certain operations of Hope Construction and Refining Company have been consolidated with those of Hope Natural Gas Company and reflected as Residuals Credit instead of sales of gas, royalty income, etc.

1937 and 1938: (a) Transfer of customers' forfeited discounts and penalties to Other Gas Revenues.

6 (b) Elimination of the value of exchange gas delivered to United Fuel Gas Company. This has been credited to Gas Purchased to offset the amount of gas revenues from The Manufacturers Light & Heat Company. There was no exchange gas of this nature recorded as sales and purchases in 1939.

Following Schedule No. 4, is Sub-schedule No. 4-A, sheets 1 to 8, inclusive, which show further details with reference to the Gas Service Revenues for the year 1939. These sheets show the various towns and districts in which the domestic, commercial and industrial sales were made, and the various companies to which gas was sold for resale.

*Other Gas Revenues and Other Income.*

Details of Other Gas Revenues and Other Income for the years 1937, 1938 and 1939, per books, and as adjusted by the examiners of accounts are shown in Schedules Nos. 2 and 1, respectively.

The adjustments to the classes of income as shown in these Schedules are as follows:

1937 and 1938: Transfer of Customers' Forfeited Discounts and Penalties from Gas Service Revenues to Other Gas Revenues.

All years: (a) Elimination of revenue from processing natural gas. This has been adjusted through the Residuals Credit account as above described in connection with the operations of Hope Construction and Refining Company.

(b) Management fees have been transferred from Miscellaneous Gas Revenues to the various operating expense accounts to offset the costs of the services rendered.

(c) Transfer of tax adjustments to the credit of Taxes. These tax adjustments represent a share of West Virginia gross sales and income taxes that are imposed by the Company on its customers in conformity with the provisions of certain sales contracts.

(d) Elimination of book profit on property retired, sold, or abandoned, recorded on the books as Miscellaneous Nonoperating Revenues. The examiners of accounts have transferred these credits to the Reserve for Depreciation.

Schedule No. 5 is presented for the purpose of showing the various classes of nonoperating revenues as reflected by the Company's books for the years 1937 and 1938, and the manner in which the examiners of accounts have reclassified the items to bring them into comparable form with those as recorded for the year 1939.

*Operating Expenses.*

Schedule No. 3 is a detailed statement by accounts of Operating Expenses, Reclassified for the years 1937 and 1938, showing adjustments made thereto for the years 1937, 1938, and 1939. This schedule shows the totals in each group of accounts and may be summarized accordingly to give the effect of the adjustments made to them:

| Particulars | Net adjustments—Increase or decrease | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| Production | $80,057.92 | $174,191.68 | *890,107.18* |
| Other production | *1,130,748.61* | *498,413.24* | *115,589.70* |
| Transmission | *716,806.28* | *835,747.99* | *471,157.85* |
| Distribution | 245,086.93 | 221,229.83 | 233,057.84 |
| Customers' accounting and collection | *65.04* | *1,240.87* | *2,012.93* |
| Sales promotion | | | |
| Administrative and general | *256,556.49* | *298,068.71* | *784,960.98* |
| Total operating expenses | *1,828,831.50* | *933,049.30* | *1,448,087.91* |

Italic figures denote decrease.

By reference to Schedule No. 1 it will be noted that under the heading of Operating Revenue Deductions are included Accounts 503.1, Depreciation, 503.2, Amortization and Depletion of Natural Gas Lands and Land Rights, 504, Amortization of Other Limited-Term Gas Investments, and 507, Taxes. The net adjustments by the examiners in these accounts are as follows:

| Account | Net adjustments—Increase or decrease* | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| 503.1 | *$496,800.96* | *$224,064.08* | $14,640.95 |
| 503.2 | *17,761.53* | *685.96* | 18,372.47 |
| 504 | | *6,611.56* | |
| 507 | *265,015.32* | *143,734.12* | *209,058.10* |
| | *779,577.81* | *373,734.96* | *176,044.68* |

* Italic figures denote decrease.

*Taxes.*

Sheets 1, 2 and 3 of Schedule No. 8 show details with respect to the taxes accrued and/or paid by the Company during the years 1939, 1938 and 1937, respectively.

Columns (b), (c), and (d) show the total amount of taxes paid or accrued during each year, separating the amounts applicable to the current year from those applicable to other years. Column (e) shows the amount of social security taxes that were charged to accounts other than Taxes, such as Work in Progress, Accounts Receivable, etc. The balance charged to Taxes per books is shown in column (f).

It will be noted that the examiners' adjustments are shown in four columns. These are shown in this manner in order to separate the various adjustments to certain categories for ready reference. It will also be noted that the adjustments in three of the columns, namely, (g), (h), and (i) have been applied to the book amounts and an extension has been made to column (j), prior to the deduction of certain additional adjustments shown in column (k).

The taxes have been extended in the above described manner for a specific purpose. The amounts shown in column (j), (the first extension) are the actual taxes applicable to the operations for each of the years shown. The amounts shown in column (1), (Adjusted Taxes) represent the amounts of the corrected taxes after eliminating certain items shown in column (k), applicable to the following:

Specific distribution taxes:

Taxes not applicable to gas operations.

Nonrecurirng taxes.

Estimated amount of state taxes applicable to property devoted to the transportation of coke oven gas.

The specific distribution taxes and taxes not applicable to gas operations are the same as those designated as such by the Company in its Exhibit No. 37 (see pages 25, 32, and 39 of that Exhibit for the years 1937, 1938, and 1939, respectively). The nonrecurring taxes are certain taxes imposed by the State of Pennsylvania prior to the removal of the Company's offices from Pittsburgh, Pennsylvania, to Clarksburg, West Virginia. The social security taxes imposed by the State of Pennsylvania have not been eliminated because it is the opinion of the examiners of accounts that additional taxes will be assessed in the State of West Virginia which will be about equal to those paid to the State of Pennsylvania on account of the employees who were transferred.

The taxes on property devoted to the transportation of coke oven gas have been estimated on an overall percentage basis of the totals of property and applicable taxes.

Subschedule No. 8-A (sheets 1, 2, and 3) is presented for the purpose of reconciling the taxes per books for the years 1939, 1938, and 1937, respectively, with the amount per Company's Exhibit No. 37, and an additional reconcilement with the total taxes applicable to operations as per final tax settlements.

It will be noted that the Company has adjusted the Federal Income Taxes for the purpose of its Exhibit No. 37 so as to reflect a rate of 18% in each of the years 1937, 1938, and 1939, instead of the actual rates paid (see note L at page 43 of Exhibit No. 37). This adjustment has not been made by the examiners of accounts. The Federal Income Taxes shown in the final columns of Schedules Nos. 8 and 8-A are the actual amounts assessed for the respective years, based on the entire net income of the Company, and, incidentally, include the tax on net icome resulting from operations in West Virginia. The examiners of accounts have made no attempt to separate the amounts of Federal Income Taxes that are applicable to net income from West Virginia sales from the amount based on interstate net income.

The amounts appearing as Nonrecurring Expenses are normal recognized operating expenses of the Company, and include such items as rent, taxes, and other miscellaneous amounts. They have been removed from the operating expenses as they principally represent costs incurred when the main office of the Company was

located at Pittsburgh, Pennsylvania, and are not expected to occur in the future.

Exploration and Development Costs appearing in Schedule No. 1 is the last group of accounts taken into consideration before arriving at the Net Utility Income. The net change in this group of accounts is as follows:

| Account | Net adjustments—increase or decrease * | | |
|---|---|---|---|
| | 1937 | 1938 | 1939 |
| 510 | *$81,166.45* | *$78,957.04* | |
| 511 | | | |
| 512 | *36,555.26* | 18,553.91 | $45,164.20 |
| Total | *117,721.71* | *60,583.13* | 45,164.20 |

* Italic figures denote decrease.

The adjustments made to these accounts are discussed in a separate study that is entitled, Exploration and Development Costs.

Other Income appearing in Schedule No. 1 contains certain adjustments that include rearrangement of book profit on property retired, sold or abandoned, and taxes not applicable to natural gas operations.

12 Income Deductions appearing in Schedule No. 1 include adjustments made to revenue and operating expense accounts and the increase represents the net results of these accounting adjustments.

Volume II of this report, as stated hereinbefore, deals with adjustments made by the Examiners and includes a summary of all adjustments, together with adjusting entries and a detailed explanation of each.

Clarksburg, West Virginia, March 24, 1941.

SAMUEL I. NICHOLS,
Samuel I. Nichols,
*Senior Examiner of Accounts.*

WALTER C. REINHARD,
Walter C. Reinhard,
*Examiner of Accounts.*

EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*

CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

*Comparative Income Statement, Reclassified for the Years 1937*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *I—Utility income* | | | | | |
| | Gas operating income | | | | | |
| 501 | Operating revenues | $20,803,789.10 | $1,501,538.87 | $21,559.35 | $19,323,829.58 | $17,306,474.74 |
| | Operating revenue deductions: | | | | | |
| 502 | Operating expenses | 14,335,231.21 | 1,356,925.46 | 3,185,756.96 | 12,506,399.71 | 13,079,483.31 |
| 503.1 | Depreciation | 1,843,745.62 | | 496,800.96 | 1,346,944.66 | 1,486,455.43 |
| 503.2 | Amort. and depl. of P. N. G. L. & L. R. | 58,465.39 | | 17,761.53 | 40,703.86 | 30,722.15 |
| 504 | Amort. of other limited term G. I. | | | | | 7,425.00 |
| 507 | Taxes | 1,583,124.94 | | 265,015.32 | 1,318,109.62 | 1,145,422.31 |
| | Total operating revenue deductions | 17,820,567.16 | 1,356,925.46 | 3,965,334.77 | 15,212,157.85 | 15,749,508.20 |
| | Net operating revenues | 2,983,221.94 | 2,858,444.33 | 3,986,894.12 | 4,111,671.73 | 1,556,966.54 |
| | Nonrecurring expenses | | 45,285.56 | | 45,285.56 | |
| | Utility income | 2,983,221.94 | 2,903,729.89 | 3,986,894.12 | 4,066,386.17 | 1,556,966.54 |
| | *II—Exploration and development costs* | | | | | |
| 510 | Delay rentals | 550,370.78 | | 81,186.45 | 469,204.33 | 917,484.59 |
| 511 | Nonproductive well drilling | 27,743.54 | | | 27,743.54 | 860,461.77 |
| 512 | Abandoned leases | 40,683.22 | | 36,555.26 | 4,127.96 | 40,678.77 |
| | Total exploration and develop. costs | 618,797.54 | | 117,721.71 | 501,075.83 | 672,625.13 |
| | Net utility income | 2,364,424.40 | 2,903,729.89 | 4,104,615.83 | 3,565,310.34 | 884,341.41 |
| | *III—Other income* | | | | | |
| 520 | Income from misc. job., and cont. work | 8,139.56 | | | 8,139.56 | 2,514.24 |
| 521 | Income from nonutility operations | | | | | |
| 522 | Revenues from lease of other phys. prop. | | | | | |
| 523 | Dividend revenues | 80,076.00 | | | 80,076.00 | 200,072.00 |
| 524 | Interest revenues | 314,613.52 | | | 314,613.52 | 316,998.51 |

Schedule No. 1

GAS COMPANY

*and 1938, Showing Adjustments for the Years 1937, 1938, and 1939*

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| $751,929.06 | $21,310.58 | $16,575,856.26 | $18,455,789.07 | $488,137.92 | $35.01 | $17,967,666.19 |
| 1,189,778.59 | 2,122,827.89 | 12,146,434.01 | 13,055,740.39 | 843,712.30 | 2,292,800.24 | 11,907,652.45 |
| | 224,964.08 | 1,262,391.35 | 1,200,000.00 | 14,640.93 | | 1,214,640.93 |
| 685.69 | | 31,407.84 | 18,400.00 | 18,372.47 | | 36,772.47 |
| | 6,611.56 | 813.44 | 6,369.47 | | | 6,369.47 |
| | 143,734.12 | 1,001,688.19 | 1,496,731.75 | | 269,058.10 | 1,227,673.65 |
| 1,190,464.28 | 2,497,237.65 | 14,442,734.83 | 15,717,241.61 | 877,725.72 | 2,561,858.34 | 14,093,108.99 |
| 1,942,393.34 | 2,518,548.23 | 2,133,121.43 | 2,738,547.46 | 1,365,883.64 | 2,561,893.38 | 3,874,537.20 |
| 51,120.43 | | 51,120.43 | | 69,256.90 | | 69,256.90 |
| 1,993,513.77 | 2,518,548.23 | 2,082,001.00 | 2,738,547.46 | 1,435,140.54 | 2,561,893.38 | 3,805,360.30 |
| | 78,937.04 | 496,347.55 | 407,284.24 | | | 407,284.24 |
| | | 86,461.77 | 47,805.17 | | | 47,805.17 |
| 18,553.96 | | 59,242.08 | | 45,104.20 | | 45,104.20 |
| 18,553.96 | 78,937.04 | 612,242.09 | 455,179.41 | 45,104.20 | | 580,343.61 |
| 2,012,067.68 | 2,597,485.27 | 1,469,759.00 | 2,282,368.05 | 1,480,304.74 | 2,561,893.38 | 3,304,959.69 |
| | | 2,514.21 | 1,383.58 | | | 1,483.58 |
| | | | 728.99 | | | 728.99 |
| | | | 747.00 | | | 747.00 |
| | | 280,072.06 | 72.00 | | | 72.00 |
| | | 316,369.51 | 256,774.03 | | | 256,774.03 |

*Comparative Income Statement, Reclassified for the Years 1937*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *III—Other income—* | | | | | |
| 526 | Miscellaneous nonoperating revenues | $67,283.68 | $16,463.51 | | $50,820.17 | $28,360.51 |
| 527 | Nonoperating revenue deductions | | 2,313.63 | | *2,313.63* | |
| | Total other income | 470,112.76 | 18,777.14 | | 451,335.62 | 547,316.29 |
| | Gross income | 2,834,537.16 | 2,922,507.03 | $4,104,615.83 | 4,016,645.96 | 1,431,657.67 |
| | *IV—Income deductions* | | | | | |
| 535 | Other interest charges | 7,306.51 | | | 7,306.51 | 9,091.78 |
| 536 | Interest charged to construction—credit | | | | | |
| 537 | Miscellaneous amortization | 4,740.72 | | | 4,740.72 | 4,740.72 |
| 538 | Miscellaneous income deductions | 19,057.99 | 320,814.60 | | 339,872.59 | 19,469.71 |
| | Total income deductions | 31,105.22 | 320,814.60 | | 351,919.82 | 33,302.19 |
| | Net income transferred to surplus | 2,803,431.94 | 3,243,321.63 | 4,104,615.83 | 3,664,726.14 | 1,398,355.48 |

NOTE.—Expenditures made in connection with company's reclassification of property accounts and river rate investigation are not included in this statement.

*and 1938, Showing Adjustments for the Years 1937, 1938, 1939*

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| $910.26 | | $27,450.25 | $296.02 | | | $296.02 |
| 2,971.77 | | *2,971.77* | *87.89* | $2,741.31 | | *2,829.20* |
| 3,882.03 | | 543,434.23 | 258,455.74 | 2,741.31 | | 255,714.43 |
| 2,015,949.71 | $2,597,485.27 | 2,013,193.23 | 2,541,823.79 | 1,483,046.05 | $2,501,893.38 | 3,260,671.12 |
| | | 9,091.75 | 7,792.92 | | | 7,792.92 |
| | | | *7,855.85* | | | *7,855.85* |
| | | *4,740.72* | *4,740.72* | | | *4,740.72* |
| 280,605.58 | | 299,775.29 | 7,062.36 | 284,492.41 | | 292,154.77 |
| 280,605.58 | | 313,607.76 | 12,840.15 | 284,492.41 | | 297,332.56 |
| 2,296,555.29 | 2,597,485.27 | 1,699,585.47 | 2,528,983.64 | 1,707,538.46 | 2,501,893.38 | 3,263,338.56 |

Italic figures denote decrease.

## HOPE NATURAL GAS COMPANY

***Summary of Examiners' Adjusting Entries for the Years 1937, 1938, and 1939***

| Account No. | Income accounts | Sched. ref. | 1937 | 1938 | 1939 |
|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) |
| 600-608 | Gas service revenues | 2 | $1,127,903.55 | $428,619.51 | $398,174.37 |
| 610-619 | Other gas revenues | 2 | 352,055.97 | 301,998.97 | 289,948.51 |
| 733-749 | Natural gas production | 3 | *30,057.99* | 174,191.68 | *304,107.78* |
| 754-757 | Other production expenses | 3 | *1,130,748.61* | *498,413.94* | *113,[illegible]* |
| 758-764 | Transmission expenses | 3 | *716,806.28* | *535,747.89* | *474,[illegible]* |
| 765-777 | Distribution expenses | 3 | 245,086.93 | 221,229.83 | 223,057.84 |
| 779-784 | Customers' accounting and collecting expense | 3 | *65.04* | *1,240.87* | *2,012.62* |
| 790-809 | Administrative & genl. exp | 3 | *256,356.49* | *293,068.71* | *784,905.96* |
| 503-506 | Depreciation & depletion | 1 | *514,562.49* | *289,989.85* | *33,[illegible]* |
| 507 | Taxes | 1 | *965,015.92* | *143,734.[illegible]* | *909,[illegible]* |
| 510-513 | Exploration & develop. costs | 1 | *117,721.71* | *59,388.13* | 45,164.30 |
| | Nonrecurring expenses | 1 | 45,285.56 | 51,120.43 | 69,[illegible] |
| 520-527 | Other income | 1 | 18,777.14 | *3,882.[illegible]* | 2,741.21 |
| 530-538 | Income deductions | 1 | *320,814.60* | 280,605.58 | 284,492.41 |
| | Net adjustments to income accts. | | *861,294.80* | *300,929.98* | *741,[illegible]* |
| | *Balance sheet accounts* | | | | |
| 104 | Gas plant held for future use | | | | 22,[illegible] |
| 126.2 | Receivables from assoc. cos | | 400,514.39 | 212,670.57 | *316,[illegible]* |
| 132 | Prepayments | | | | 14,340.00 |
| 146 | Other deferred debits | | 1,648.91 | 53,683.57 | *543,[illegible]* |
| 228 | Taxes accrued | | 11,685.80 | *30,863.62* | 2,[illegible] |
| 242 | Other deferred credits | | | | *5,[illegible]* |
| 250.1 | Reserve for depreciation of gas plant | | 421,122.04 | 68,292.36 | *101,[illegible]* |
| 250.2 | Reserve for depletion of producing natural gas lands and land rights | | *40,703.86* | *31,[illegible]* | *98,[illegible]* |
| 250.3 | Reserve for abandoned leases | | 832.15 | 2,505.33 | |
| 271 | Surplus as of Jan. 1, 1937 | | 66,194.77 | | |
| 271 | Surplus as of Jan. 1, 1938 | | | 25,999.67 | |
| 271 | Surplus as of Jan. 1, 1939 | | | | 25,[illegible] |
| | Net adjustments to balance sheet accounts | | 861,294.20 | 300,929.98 | 741,[illegible] |

Italic figures denote decrease.

*Operating revenues reclassified for the years 1937 and 1938.*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Gas service revenues* | | | | | |
| 600 | Residential sales | $1,782,135.67 | $20,825.01 | | $1,761,310.66 | $1,684,169.76 |
| 602.1 | Commercial sales | | | | | |
| 602.2 | Industrial sales | 1,586,552.14 | 520.58 | | 1,586,031.56 | 1,008,699.35 |
| 603 | Public street and highway lighting | 469.80 | 6.84 | | 462.96 | 452.35 |
| 604 | Other sales to public authorities | 8,307.16 | 16.85 | | 8,290.31 | 7,815.55 |
| 605.1 | Sales to affiliated utilities | 14,223,210.61 | 105,180.39 | | 14,118,030.22 | 12,340,612.00 |
| 605.2 | Sales to nonaffiliated utilities | 2,627,630.27 | 920,095.47 | | 1,703,524.80 | 1,775,780.82 |
| 608 | Other sales | 142,177.54 | 81,258.41 | | 60,919.13 | 124,300.30 |
| | Total gas service revenues | 20,366,473.19 | 1,127,903.55 | | 19,238,569.64 | 16,941,830.32 |
| | *Other gas revenues* | | | | | |
| 610 | Rent from gas property | 28,455.91 | | | 28,455.91 | 29,336.96 |
| 612 | Customers' forfeited discounts and penalties | | | $21,559.35 | 21,559.35 | |
| 617.1 | Revenue from processing natural gas—Cont. gas | 82,076.76 | 82,076.76 | | | 58,360.34 |
| 617.2 | Revenue from processing natural gas—butane gas | 23,559.07 | 23,559.07 | | | 16,990.54 |
| 618 | Revenue from incidental oil sales | 6,051.48 | | | 6,051.48 | 2,836.00 |
| 619.1 | Warehouse sales | 11,011.26 | | | 11,011.26 | 6,849.16 |
| 619.2 | Unclaimed security deposits | 120.51 | | | 120.51 | 83.31 |
| 619.3 | Management fees and expenses | 248,768.17 | 240,382.25 | | 7,985.92 | 229,434.42 |
| 619.4 | Unclaimed checks | 438.90 | | | 438.90 | 372.31 |
| 619.5 | Shop labor—field | 2,256.30 | | | 2,256.30 | 1,831.00 |
| 619.6 | Gas sales contract adjustments | 27,597.24 | 27,597.24 | | | 22,274.17 |
| 619.9 | Other miscellaneous gas revenues | 7,380.31 | | | 7,380.31 | 9,184.80 |
| | Total other gas revenues | 437,315.91 | 373,615.32 | 21,559.35 | 85,259.94 | 364,644.42 |
| | Total operating revenues | 20,803,789.10 | 1,501,518.87 | 21,559.35 | 19,323,829.58 | 17,306,474.74 |

Italic figures denote decrease.

Schedule No. 2

GAS COMPANY

*showing adjustments for the years 1937, 1938, and 1939*

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| $30,531.21 | | $1,663,638.55 | 1,300,980.56<br>245,939.68 | $35.04 | $34.78 | $1,300,945.82<br>245,974.46 |
| 625.84 | | 1,008,673.71 | 1,236,209.93 | | .26 | 1,236,210.19 |
| | | 452.35 | 308.51 | | | 308.51 |
| 19.39 | | 7,796.16 | 259.39 | | | 259.39 |
| 86,116.35 | | 12,254,495.65 | 13,930,353.97 | 115,923.12 | | 13,814,430.85 |
| 244,603.80 | | 1,531,177.01 | 1,066,668.85 | 5,460.00 | | 1,061,208.85 |
| 76,722.92 | | 47,577.38 | 116,424.22 | 76,791.25 | | 39,632.97 |
| 428,619.51 | | 16,513,210.81 | 18,097,145.11 | 198,209.41 | 35.04 | 17,898,970.74 |
| | | 20,326.60 | 23,426.64 | | | 23,426.64 |
| | $21,310.58 | 21,310.58 | 21,564.78 | | | 21,564.78 |
| 58,503.34 | | | 60,848.62 | 60,848.62 | | |
| 16,990.54 | | | 25,915.65 | 25,915.65 | | |
| | | 2,836.00 | 6,847.58 | | | 6,847.58 |
| | | *6,282.16* | 1,258.66 | | | 1,258.66 |
| | | 83.31 | 25.11 | | | 25.11 |
| 225,451.50 | | 3,982.92 | 195,229.92 | 192,415.89 | | 2,814.03 |
| | | 372.31 | *10.95* | | | *10.95* |
| | | 1,831.00 | 315.81 | | | 315.81 |
| 22,274.17 | | | 10,768.35 | 10,768.35 | | |
| | | 9,184.89 | 12,453.79 | | | 12,453.79 |
| 323,309.55 | 21,310.58 | 62,645.45 | 358,643.96 | 289,948.51 | | 68,695.45 |
| 751,929.06 | 21,310.58 | 16,575,856.26 | 18,455,789.07 | 488,157.92 | 35.04 | 17,967,666.19 |

*Operating expenses reclassified for the years 1937 and 1938*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Natural gas production* | | | | | |
| | Operation: | | | | | |
| 733 | Operation supervision and engineering | $88,640.65 | | $10,926.21 | $77,714.44 | $89,476.70 |
| 734 | Operation labor: | | | | | |
| 734.1 | Gas well labor | 176,642.98 | | | 176,642.98 | 167,444.30 |
| 734.2 | Field line labor | 88,321.52 | | 394.62 | 87,926.90 | 83,722.09 |
| 734.3 | Field meas. and reg. station labor | 13,646.14 | | 1,769.75 | 11,876.39 | 14,828.39 |
| 734.4 | Other production labor | 267,527.77 | | 15,607.85 | 251,919.92 | 286,836.48 |
| | Total operation labor | 546,138.41 | | 17,772.22 | 528,366.19 | 562,831.16 |
| 735 | Operation supplies and expenses: | | | | | |
| 735.1 | Gas well supplies and expenses | 12,971.05 | | | 12,971.05 | 14,255.64 |
| 735.2 | Field line supplies and expenses | 6,485.49 | | 28.98 | 6,456.51 | 6,627.83 |
| 735.3 | Field meas. and reg. station supplies and expenses | 2,422.67 | | 157.62 | 2,265.05 | 1,831.01 |
| 735.4 | Other supplies and expenses | 73,910.78 | | 183.11 | 73,727.67 | 84,229.49 |
| | Total operation supplies and exp | 95,789.99 | | 369.71 | 95,420.28 | 105,943.97 |
| 736 | Purification supplies and expenses | | | | | |
| 737 | Production maps and records | | | | | |
| 738 | Miscellaneous production expenses | | | | | |
| | Total production operation | 730,569.05 | | 29,068.14 | 701,500.91 | 758,251.83 |
| | Maintenance: | | | | | |
| 739 | Maintenance super. and engineering | | | | | |
| 740 | Maintenance of struct. and improve. | | | | | |
| 740.1 | Mtce. of gas well structures | | | | | |
| 740.2 | Mtce. of field meas. & reg. sta. struct | 4,080.52 | | | 4,080.52 | 5,951.78 |
| 740.3 | Mtce. of other prod. system struct | | | | | |

Schedule No. 3

GAS COMPANY

*showing adjustments for the years 1937, 1938, and 1939*

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | $12,506.75 | $76,969.95 | $91,308.65 | | $11,953.66 | $79,354.99 |
| | | 167,444.20 | 330,338.52 | | | 330,338.52 |
| | 374.07 | 83,348.02 | 115,199.83 | | 514.71 | 114,685.12 |
| | 2,074.87 | 12,753.52 | 12,523.85 | | 1,314.03 | 11,209.82 |
| | 18,014.49 | 278,821.99 | 114,907.29 | | 3,608.87 | 111,298.42 |
| | 20,463.43 | 542,367.73 | 572,969.49 | | 5,437.61 | 567,531.88 |
| | | 13,255.64 | 130,999.56 | | | 130,999.56 |
| | 29.61 | 6,598.22 | 18,292.54 | | 81.73 | 18,210.81 |
| | 100.17 | 1,730.84 | 2,881.05 | | 157.62 | 2,723.43 |
| | 213.86 | 84,015.63 | 33,814.96 | | | 33,814.96 |
| | 343.64 | 105,600.33 | 185,988.11 | | 239.35 | 185,748.76 |
| | | | 2,846.82 | | 244.08 | 2,602.74 |
| | | | 3,467.73 | | | 3,467.73 |
| | 33,313.82 | 724,938.01 | 856,580.80 | | 17,874.70 | 838,706.10 |
| | | | 18,267.01 | | 126.11 | 18,140.90 |
| | | 5,951.78 | 117.73 | | | 117.73 |
| | | | 3,487.47 | | | 3,487.47 |

*Operating expenses reclassified for the years 1937 and 1938,*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Natural gas production* —Con. | | | | | |
| | Maintenance—Con. | | | | | |
| 741 | Maintenance of prod. gas well equipt | $387,760.81 | | | $387,760.81 | $414,865.94 |
| 742 | Maintenance of field lines and equipt: | | | | | |
| 742.1 | Maintenance of field lines | 171,968.04 | | | 171,968.04 | 164,199.40 |
| 742.2 | Mtce. of field meas. & reg. sta. equipt | 500.26 | | | 500.26 | 843.83 |
| 743 | Maintenance of drilling & cleaning equipt | | | | | |
| 744 | Mtce. of other natural gas property | 3,342.16 | | | 3,342.16 | 4,325.47 |
| | Total production maintenance | 567,651.79 | | | 567,651.79 | 587,126.09 |
| | Miscellaneous: | | | | | |
| 745 | Gas well royalties | 777,971.44 | $81,166.45 | | 859,137.89 | 770,691.12 |
| 746 | Natural gas rents | 5,683.58 | | | 5,683.58 | 6,349.83 |
| 747.1 | Residuals produced—Cr | | | $979,829.94 | *979,829.94* | |
| 747.2 | Residuals operation expenses | | 611,823.94 | | 611,823.94 | |
| 747.3 | Residuals maintenance expenses | | | | | |
| 748.1 | Joint expenses—Dr | | | | | |
| 748.2 | Joint expenses—Cr | | | | | |
| 749 | Duplicate charges—Cr | *1,005,037.82* | *345,965.68* | | *659,072.14* | *985,185.85* |
| | Total miscellaneous | *221,382.80* | 1,038,956.07 | 979,829.94 | *162,256.67* | *151,605.90* |
| | Total natural gas production | 1,076,838.04 | 1,038,956.07 | 1,038,898.08 | 1,106,896.03 | 1,103,983.02 |
| 17 | *Other production expenses* | | | | | |
| | Miscellaneous: | | | | | |
| 754 | Gas purchased: | | | | | |
| 754.1 | Gas purchased—natural gas | | | | | |
| 754.11 | Nat. gas purchased from aff. co.'s | 244,016.23 | | 121,234.87 | 122,781.36 | 227,234.17 |
| 754.12 | Nat. gas purchased from others | 8,621,616.15 | | 774,048.60 | 7,847,597.55 | 7,570,340.20 |
| 754.121 | Gas purchased contract adjustments | | | | | |
| | Total gas purchased, nat. gas | 8,865,632.38 | | 895,283.47 | 7,970,378.91 | 7,797,574.37 |
| 754.21 | Other gas purchased from aff. co.'s | 297,328.14 | | 297,328.14 | | 247,677.58 |

*Italic figures denote decrease.

*showing adjustments for the years 1937, 1938, and 1939—Continued*

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | $436.74 | $414,369.17 | $53,974.29 | | $516.37 | $53,457.92 |
| | | 161,199.40 | 146,851.93 | | | 146,851.93 |
| | | 843.83 | 705.69 | | | 705.69 |
| | | | | | | |
| | | 4,325.17 | 2,311.11 | | | 2,311.11 |
| | 436.74 | 586,689.35 | 225,715.23 | | 642.48 | 225,072.75 |
| $78,937.04 | | 849,028.16 | 828,851.62 | | | 828,851.62 |
| | | 6,399.83 | 508.90 | | | 508.90 |
| | 678,035.37 | 678,035.37 | | | 892,706.83 | 892,706.83 |
| 517,592.04 | | 517,592.04 | | $607,116.83 | | 607,116.83 |
| | | | | | | |
| 289,448.53 | | 638,735.52 | 471,685.78 | | | 471,685.78 |
| 885,977.61 | 678,035.37 | 56,249.34 | 357,674.74 | 607,116.83 | 892,706.83 | 72,084.74 |
| 885,977.61 | 711,785.93 | 1,367,876.70 | 1,439,970.77 | 607,116.83 | 911,224.01 | 1,135,863.59 |
| | | | | | | |
| | 116,702.57 | 110,511.60 | 213,815.34 | | 110,115.66 | 103,699.68 |
| | 205,777.80 | 7,364,562.40 | 7,418,215.35 | | 11.66 | 7,418,203.69 |
| | | | 1,202.88 | | | 1,202.88 |
| | 322,480.37 | 7,475,074.00 | 7,633,233.57 | | 110,127.32 | 7,523,106.25 |
| | 245,975.58 | | | | | |

*Operating expenses reclassified for the years 1937 and 1938*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| | *Other production expenses*—Continued | | | | | |
| | Miscellaneous—Continued | | | | | |
| | Gas purchased—Con. | | | | | |
| 755 | Purchased gas expense | | | | | |
| 755.1 | Purchased gas operating labor | $99,763.61 | | $6,132.40 | $93,631.21 | $101,939.94 |
| 755.2 | Purchased gas supplies and expenses | 28,518.40 | | 4,852.67 | 23,665.73 | 24,075.85 |
| 755.3 | Mtce. of pur. gas meas. sta. struct. | | | | | |
| 755.4 | Mtce. of pur. gas meas. sta. equipt. | | | | | |
| 755.5 | Purchased gas rent | | | | | |
| | Total purchased gas expense | 128,282.01 | | 10,985.07 | 117,296.94 | 126,015.79 |
| | Total gas purchased | 9,291,272.53 | | 1,203,596.68 | 8,087,675.85 | 8,169,545.74 |
| | Production expenses—cost of aband'g | | $72,848.07 | | 72,848.07 | |
| | Total other production expenses | 9,291,272.53 | 72,848.07 | 1,203,596.68 | 8,160,523.92 | 8,169,545.74 |
| | *Transmission expenses* | | | | | |
| | Operation: | | | | | |
| 758 | Operation, supervision, and engineering | 14,017.01 | | 1,787.08 | 12,229.93 | 16,329.51 |
| 759 | Transmission operations: | | | | | |
| 759.1 | Pumping and regulating expenses | | | | | |
| 759.111 | Pumping station labor | 507,650.08 | | 19,046.34 | 488,603.74 | 499,192.55 |
| 759.112 | Measuring and reg. station labor | 17,136.72 | | | 17,136.72 | 17,481.73 |
| 759.1211 | Pumping sta. supplies and exp. | 193,024.43 | | 107,596.90 | 85,427.53 | 130,832.13 |
| 759.1212 | Pumping station fuel | 1,034,745.67 | | 423,563.60 | 611,182.07 | 553,098.71 |
| 759.122 | Meas. & reg. sta. supp. and exp. | 1,131.45 | | | 1,131.45 | 1,530.81 |
| | Total pumping and regulating exp. | 1,753,688.35 | | 550,206.84 | 1,203,481.51 | 1,583,635.91 |
| 759.2 | Operation of transmission mains: | | | | | |
| 759.21 | Operation of trans. mains—labor | 35,691.38 | | 738.17 | 34,953.21 | 33,946.92 |
| 759.22 | Operation of trans. mains—supp. &exp. | 5,551.59 | | 114.82 | 5,436.77 | 4,597.90 |
| 759.23 | Transp. & comp. chgs.—paid others | 46,610.52 | | | 46,610.52 | 55,035.02 |

*showing adjustments for the years 1937, 1938, and 1939—Continued*

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | Adjusted | Per books | Adjustments | | Adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| | | (k) | (l) | (m) | | (n) |
| | $7,168.23 | $94,771.71 | $92,947.89 | | $5,823.11 | $97,124.78 |
| | 4,933.99 | 19,179.86 | 16,627.99 | | 32.27 | 16,595.72 |
| | | | 395.18 | | | 395.18 |
| | | | 2,608.90 | | | 2,608.90 |
| | | | 1,040.25 | | | 1,040.25 |
| | 12,124.22 | 113,891.57 | 113,620.21 | | 5,855.38 | 107,764.83 |
| | 580,580.17 | 7,588,965.57 | 7,746,853.78 | | 115,982.70 | 7,630,871.08 |
| $82,166.93 | | 82,166.93 | | | | |
| 82,166.93 | 580,580.17 | 7,671,132.50 | 7,746,853.78 | | 115,982.70 | 7,630,871.08 |
| | 2,513.48 | 13,816.03 | 18,519.99 | | 1,815.39 | 16,704.60 |
| | 19,280.64 | 470,911.89 | 464,254.02 | | 20,573.83 | 443,680.19 |
| | | 17,484.73 | 16,033.75 | | | 16,033.75 |
| | 87,861.21 | 62,970.92 | 202,495.18 | | 119,429.76 | 83,065.42 |
| | 365,418.41 | 558,190.30 | 708,713.26 | | 311,006.68 | 397,706.58 |
| | | 1,539.81 | 2,159.09 | | | 2,159.09 |
| | 472,560.26 | 1,111,088.65 | 1,393,655.30 | | 451,010.27 | 942,645.03 |
| | 702.09 | 33,244.83 | 77,729.82 | | 1,907.53 | 76,118.29 |
| | 95.09 | 4,502.81 | 7,423.19 | | 133.53 | 7,289.66 |
| | | 55,035.02 | 60,446.14 | | | 60,446.14 |

*Operating expenses reclassified for the years 1937 and 1938,*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Transmission expenses*—Con. | | | | | |
| | Operation—Con. | | | | | |
| | Transmission operations—Con. | | | | | |
| | Operation of transmission mains—Con. | | | | | |
| 750.24 | Other transmission system expense | $93,770.75 | | $2,441.38 | $91,329.37 | $80,494.26 |
| | Total operation of trans. mains | 181,624.24 | | 3,294.37 | 178,329.87 | 180,074.10 |
| 750.3 | Transmission maps and records | | | | | |
| | Total transmission operations | 1,949,329.60 | | 555,288.29 | 1,394,041.31 | 1,780,052.52 |
| | Maintenance: | | | | | |
| 760 | Maintenance supervision and eng. | | | | | |
| 761 | Maintenance of struct. and improve. | | | | | |
| 761.1 | Mtce. of pump. station struct. | 107,963.53 | | 4,897.54 | 103,065.99 | 82,143.19 |
| 761.2 | Mtce. of meas. & reg. sta. struct. | 247.70 | | | 247.70 | 53.98 |
| 761.8 | Mtce. of other trans. sys. struct. | 819.71 | | | 819.71 | 1,839.38 |
| 18 762 | Maintenance of Transmission Lines | | | | | |
| 762.1 | Maintenance of mains | 143,343.00 | | 2,964.62 | 140,378.38 | 96,920.87 |
| 762.2 | Mtce. of pumping, reg. & misc. equipt. | | | | | |
| 762.21 | Mtce. of pumping station equipt. | 210,028.07 | | 670.01 | 209,358.06 | 141,306.49 |
| 762.22 | Mtce. of meas. & reg. sta. equipt. | 937.05 | | | 937.05 | 2,090.84 |
| 762.23 | Mtce. of other trans. sys. equipt. | 178.93 | | | 178.93 | 264.04 |
| | Total transmission maintenance | 463,317.99 | | 8,532.17 | 454,985.82 | 327,619.79 |

*showing adjustments for the years 1937, 1938, and 1939*—Continued

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | $7,105.84 | $79,388.42 | $21,984.61 | | $2,286.83 | $19,697.78 |
| | 7,903.02 | 172,171.08 | 167,880.06 | | 4,047.89 | 163,832.17 |
| | | | 700.00 | | | 700.00 |
| | 482,976.76 | 1,207,075.76 | 1,580,516.25 | | 456,873.55 | 1,123,642.70 |
| | | | 5,790.39 | | 14.56 | 5,775.83 |
| | 2,865.71 | 59,279.48 | 51,238.27 | | 2,082.75 | 49,155.52 |
| | | 62.94 | 38.17 | | | 38.17 |
| | | 1,839.39 | 1,278.65 | | | 1,278.65 |
| | 2,004.70 | 94,925.17 | 52,398.82 | | 1,083.09 | 51,285.73 |
| | 2,376.34 | 191,930.15 | 180,716.87 | | 7,877.61 | 182,130.26 |
| | | 2,060.84 | 639.33 | | | 639.33 |
| | | 264.04 | 24,853.02 | | | 24,853.02 |
| | 7,246.75 | 350,363.01 | 325,943.52 | | 10,758.01 | 315,185.51 |

*Operating expenses reclassified for the years 1937 and 1938*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Transmission expenses*—Con. | | | | | |
| | Maintenance—Continued. | | | | | |
| | Maintenance of Transmission Lines—Con. | | | | | |
| | Miscellaneous: | | | | | |
| 763 | Rents: | | | | | |
| 763.1 | Trans. and comp. of gas by others | | | | | |
| 763.2 | Rents | $1,764.89 | | | $1,764.89 | $1,894.34 |
| 764.1 | Joint expenses—Dr. | | | | | |
| 764.2 | Joint expenses—Cr. | | | $152,985.82 | *152,985.82* | |
| | Total miscellaneous | 1,764.89 | | 152,985.82 | *151,220.93* | 1,894.34 |
| | Total transmission expenses | 2,414,612.48 | | 716,806.28 | 1,697,806.20 | 2,139,356.62 |
| | *Distribution expenses* | | | | | |
| | Operation | | | | | |
| 765 | Operation supervision and engineering | 35,170.85 | | 24.39 | 35,146.46 | 22,377.31 |
| (1) | Other distribution system labor | 29,389.40 | | | 29,389.40 | 21,711.21 |
| 766 | Distribution office expenses | | | | | |
| 766.1 | Distribution maps and records | 16,426.54 | | | 16,426.54 | 17,191.14 |
| 766.2 | Other distribution office expenses | 18,388.52 | | | 18,388.52 | 21,138.01 |
| 767 | Operation of distribution lines | 22,101.31 | | | 22,101.31 | 22,212.54 |
| 768 | Operation of meters | | | | | |
| 768.1 | Removing and resetting meters | 32,182.01 | | | 32,182.01 | 31,280.01 |
| 768.2 | Miscellaneous meter expenses | 7,377.44 | | | 7,377.44 | 7,301.31 |
| 769 | Services on customers' premises | 14,687.79 | | | 14,687.79 | 16,584.33 |
| | Total distribution operation | 176,124.86 | | 34.39 | 176,090.47 | 158,804.29 |
| | Maintenance | | | | | |
| 771 | Maintenance supervision and eng. | | | | | |
| 772 | Maintenance of struct. and Improvs. | 2,277.02 | | | 2,277.02 | 2,042.90 |
| 773 | Maintenance of distribution lines: | | | | | |
| 773.1 | Maintenance of mains | 54,312.52 | | | 54,312.52 | 55,545.17 |

(1) Not provided for in the new classification.

Italic figures denote decrease.

*showing adjustments for the years 1937, 1938, and 1939*—Continued

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | | $1,804 31 | $1,808 31 | | | $1,808 31 |
| | $45,524 48 | 45,524 48 | 1,975 26 | | $6,305 73 | 7,780 99 |
| | 45,524 48 | 47,328 79 | 533 05 | | 6,305 73 | 5,972 68 |
| | 535,747 99 | 1,003,808 63 | 1,906,992 82 | | 474,137 29 | 1,432,855 53 |
| | 34 00 | 22,328 51 | 8,988 23 | | 25 16 | 8,962 07 |
| | 370 22 | 23,309 96 | | | | |
| | | 14,191 14 | 2,588 17 | | | 2,588 17 |
| | | 21,138 04 | 3,674 72 | | | 3,674 72 |
| | | 22,311 54 | 34,897 11 | | | 34,897 11 |
| | | 31,289 01 | 33,935 02 | | | 33,935 02 |
| | | 7,201 51 | 6,990 85 | | | 6,990 85 |
| | | 16,584 33 | 13,327 35 | | 103 53 | 13,223 82 |
| | 404 22 | 158,408 07 | 103,802 05 | | 129 09 | 103,672 36 |
| | | | 6,874 60 | | 24 48 | 6,850 12 |
| | | 2,942 90 | 3,540 21 | | | 3,540 21 |
| | | 72,545 17 | 31,235 02 | | | 31,235 02 |

*Operating expenses reclassified for the years 1937 and 1938*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Distribution expenses*—Con. | | | | | |
| | Maintenance—Continued. | | | | | |
| | Maintenance of distribution lines—Continued | | | | | |
| 773.2 | Mtce. of pumping and reg. equipt | $2,164.82 | | | $2,164.82 | $2,000.63 |
| 773.3 | Maintenance of services | 14,887.46 | | | 14,887.46 | 18,088.22 |
| 773.4 | Maintenance of meters | 29,404.91 | | | 29,404.91 | 26,704.05 |
| 773.5 | Maintenance of house regulators | | | | | |
| 773.6 | Mtce. of other prop. on cust. prem | | | | | |
| 774 | Maintenance of street lighting equipt | | | | | |
| 775 | Mtce. of other distribution equipt | 177.10 | | | 177.10 | 211.88 |
| | Total distribution maintenance | 103,223.83 | | | 103,223.83 | 123,592.25 |
| 19 | Miscellaneous: | | | | | |
| 776 | Rents | 1,279.67 | | | 1,279.67 | 1,625.67 |
| 777.1 | Joint expenses—Dr | | | | | |
| 777.2 | Joint expenses—Cr | | | | | |
| | Total miscellaneous | 1,279.67 | | | 1,279.67 | 1,625.67 |
| | Direct distribution expenses transferred | | $245,121.32 | | 245,121.32 | |
| | Total distribution expenses | 280,628.36 | 245,121.32 | $34.39 | 525,715.29 | 284,022.21 |
| | *Customers' accounting and collecting expenses* | | | | | |
| 779 | Supervision | | | | | |
| 780 | Customers' contracts, orders, meter reading and collecting: | | | | | |
| 780.1 | Customers' contracts and orders | | | | | |
| 780.2 | Credit investigations and records | | | | | |
| 780.3 | Meter reading | 28,128.73 | | | 28,128.73 | 29,202.78 |
| 780.4 | Collecting | | | | | |
| 781 | Customers' billing and accounting | 69,955.26 | | 65.04 | 69,890.22 | 79,170.04 |
| 782 | Miscellaneous expenses | | | | | |
| 783 | Uncollectible accounts | 3,410.12 | | | 3,410.12 | 4,314.29 |
| 784 | Rents | 30.00 | | | 30.00 | |
| | Total customers' accounting and collecting expenses | 101,524.11 | | 65.04 | 101,459.07 | 112,776.71 |

*showing adjustments for the years 1937, 1938, and 1939*—Continued.

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | | | | | | |
| | | $2,000.03 | $3,161.37 | | | $3,161.37 |
| | | 18,088.22 | 15,576.45 | | | 15,576.45 |
| | | 28,704.05 | 35,710.90 | | | 35,710.90 |
| | | | 32.70 | | | 32.70 |
| | | | 349.11 | | | 349.11 |
| | | | 6.52 | | | 6.52 |
| | | 211.88 | 455.03 | | | 455.03 |
| | | 123,592.25 | 96,941.01 | | $24.48 | 96,917.43 |
| | | 1,625.67 | 1,185.22 | | | 1,185.22 |
| | | 1,625.67 | 1,185.22 | | | 1,185.22 |
| $221,634.05 | | 221,634.05 | | $233,212.01 | | 233,212.01 |
| 221,634.05 | $404.22 | 505,252.04 | 201,929.18 | 233,212.01 | 154.17 | 434,987.02 |
| | | | 18,455.48 | | 331.83 | 18,123.65 |
| | | | 10,336.92 | | | 10,336.92 |
| | | | 15.00 | | | 15.00 |
| | | 29,292.38 | 39,475.55 | | | 39,475.55 |
| | | | 35,852.86 | | 244.44 | 35,608.42 |
| | 1,240.87 | 77,929.17 | 39,201.07 | | 1,009.66 | 38,191.41 |
| | | | 41,248.50 | | 426.70 | 10,821.80 |
| | | 4,314.29 | 5,588.73 | | | 5,588.73 |
| | | | 114.00 | | | 114.00 |
| | 1,240.87 | 111,535.84 | 160,288.11 | | 2,012.63 | 158,275.48 |

*Operating expenses reclassified for the years 1937 and 1938,*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Sales promotion expense* | | | | | |
| 785 | Supervision | | | | | |
| 786 | Salaries and commissions | | | | | |
| 787 | Demonstration, advertising and other sales expenses | | | | | |
| 787.1 | Demonstration | | | | | |
| 787.2 | Advertising | | | | | |
| 787.3 | Miscellaneous sales expenses | | | | | |
| | Total sales promotion expenses | | | | | |
| | *Administrative and general expenses* | | | | | |
| 790 | Salaries of general officers and executives | $95,249.93 | | $32,188.68 | $63,061.25 | $41,720.81 |
| 791 | Other general office salaries | 318,493.99 | | 106,321.51 | 212,172.48 | 341,618.81 |
| 792 | Expenses of general officers and general office employes | | | | | |
| 792.1 | Expenses of general officers | 4,243.29 | | | 4,243.29 | 4,250.16 |
| 792.2 | Expenses of general office employes | 72,851.89 | | 2,395.13 | 70,456.76 | 63,719.02 |
| 793 | General office supplies and expenses | 11,375.70 | | 1,077.87 | 10,297.83 | 9,828.54 |
| 794 | Management and supervision, fees and expenses: | | | | | |
| 795 | Special services | 54,928.41 | | 19,712.39 | 35,216.02 | 77,742.98 |
| 796 | Special legal services | 21,419.13 | | | 21,419.13 | 35,788.74 |
| 797 | Regulatory commission expenses | | | | | 215.80 |
| 798 | Insurance | 8,523.43 | | | 8,523.43 | 7,858.47 |
| 799 | Injuries and damages | 1,672.80 | | | 1,672.80 | 1,258.17 |
| 800 | Employes' welfare exp. and pensions | | | | | |
| 800.1 | Employes' welfare expenses | 381,279.46 | | 24,873.22 | 356,406.24 | 374,894.12 |
| 800.2 | Pensions | | | | | |
| 801 | Miscellaneous general expenses | 18,258.28 | | 411.66 | 17,846.62 | 15,931.84 |
| 802 | Maintenance of general property | | | | | |
| 802.1 | Mtce. of struct. and improv | 623.45 | | | 623.45 | 170.21 |
| 802.2 | Mtce. of office furn. and equip | 1,271.14 | | | 1,271.14 | 1,360.18 |
| 802.3 | Mtce. of communication equipment | 81,390.53 | | 8,479.09 | 72,911.44 | 81,731.39 |

Italic figures denote decrease.

*showing adjustments for the years 1937, 1938, and 1939*—Continued

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | | | $5,201.87 | | | $5,201.87 |
| | | | 1.84 | | | 1.84 |
| | | | 175.50 | | | 175.50 |
| | | | 12.58 | | | 12.58 |
| | | | 5,891.75 | | | 5,891.75 |
| | $36,565.85 | $65,287.06 | 64,929.97 | | $20,022.51 | 44,907.46 |
| | 117,410.18 | 224,248.63 | 260,669.25 | | 95,318.90 | 265,200.35 |
| | 13.80 | 4,796.36 | 2,927.88 | | | 2,925.88 |
| | 3,992.38 | 30,717.97 | 37,108.14 | | 5,605.40 | 31,502.74 |
| | 1,336.16 | 8,492.48 | 33,143.95 | | 2,957.12 | 30,186.83 |
| | 45,987.17 | 31,855.71 | 9,554.01 | | 2,732.72 | 6,821.29 |
| | 6,933.01 | 28,855.73 | 12,908.21 | $1,383.46 | | 10,891.67 |
| | | 215.80 | 215,071.72 | | 315,096.86 | 4.86 |
| | | 7,858.37 | 7,145.67 | | | 7,145.67 |
| | | 1,218.15 | 1,048.77 | | | 1,038.71 |
| | 16,570.92 | 318,923.20 | 276,974.62 | | 26,027.43 | 250,927.19 |
| | | | 135,767.28 | | 16,318.12 | 119,449.16 |
| | 629.79 | 15,302.05 | 317,884.10 | | 245,199.33 | 772,684.77 |
| | | 170.21 | 49.75 | | | 49.75 |
| | 24.61 | 1,279.57 | 1,941.91 | | | 1,941.91 |
| | 4,696.12 | 77,045.24 | 37,556.52 | | 848.70 | 36,707.82 |

*Operating expenses reclassified for the years 1937 and 1938,*

| Account No. | Account | 1937 | | | | 1938 |
|---|---|---|---|---|---|---|
| | | Per books reclassified | Adjustments | | As adjusted | Per books reclassified |
| | | | Dr. | Cr. | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Administrative and general expenses*—Continued | | | | | |
| | Maintenance of general property—Continued. | | | | | |
| 802.4 | Mtce. of miscellaneous property | | | | | |
| 803 | Rents | $49,714.77 | | $49,714.77 | | $53,184.17 |
| 804 | Commissions paid under agency sales contract | | | | | |
| 805 | Franchise requirements | 11,184.17 | | 18,184.17 | | 10,566.30 |
| 806 | Duplicate misc. charges—Cr. | | | | | |
| 807 | Adminis. & genl. expenses transf.—Cr. | | | | | |
| 808 | Joint expenses—Dr. | | | | | |
| 809 | Joint expenses—Cr. | | | | | |
| 902 | Stores expenses—Clearing | 13,643.13 | | | $13,643.13 | 27,324.17 |
| 903.1 | Transportation expenses—Clearing | 21,232.19 | | | 21,232.19 | 30,569.25 |
| | Total adminis. & genl. expenses | 1,170,355.69 | | 256,356.49 | 913,999.20 | 1,179,497.01 |
| | Total operating expenses | 14,335,231.21 | $1,356,925.46 | 3,185,756.96 | 12,506,399.71 | 13,079,163.31 |

Italic figures denote decreased.

*showing adjustments for the years 1937, 1938, and 1939*—Continued

| 1938 | | | 1939 | | | |
|---|---|---|---|---|---|---|
| Adjustments | | As adjusted | Per books | Adjustments | | As adjusted |
| Dr. | Cr. | | | Dr. | Cr. | |
| (h) | (i) | (j) | (k) | (l) | (m) | (n) |
| | $53,454.17 | | $47,531.06 | | $47,531.06 | |
| | 10,565.30 | | 11,571.29 | | 11,571.29 | |
| | | | *79,438.56* | | | *$79,438.56* |
| | 801.61 | $26,522.56 | | | | |
| | 4,247.64 | 16,321.61 | | | | |
| | 293,068.71 | 886,828.30 | 1,593,813.98 | $4,383.46 | 789,289.44 | 808,908.00 |
| $1,189,778.59 | 2,122,827.89 | 12,146,434.01 | 13,055,740.39 | 844,712.30 | 2,292,800.24 | 11,607,652.45 |

Schedule No. 4
Sheet 1 of 3

## HOPE NATURAL GAS COMPANY

*Gas Service Revenues—Per Books and as Adjusted 1939*

| Acct. No. | Account | No. of accounts Dec. 31, 1939 | Volume mcf | Average rate per mcf | Amount per books | Examiners' reclassifications and adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| 600 | Residential sales | 39,179 | 3,991,037 | $0.3761 | $1,500,980.56 | $35.04 | | $1,500,945.52 |
| 602.1 | Commercial sales | 3,559 | 653,024 | .3767 | 245,939.68 | | $34.78 | 245,974.46 |
| 602.2 | Industrial sales | 194 | 4,825,474 | .2562 | 1,236,209.93 | | .26 | 1,236,210.19 |
| 603 | Public street and highway lighting | 3 | 794 | .3886 | 308.51 | | | 308.51 |
| 604 | Sales to other public authorities | 2 | 778 | .3334 | 259.39 | | | 259.39 |
| 605.1 | Sales to other gas utilities (affiliated): | | | | | | | |
| | The East Ohio Gas Company: | | | | | | | |
| | Regular gas | 1 | 24,638,195 | .3850 | 9,485,705.11 | | | 9,485,705.11 |
| | Special industrial gas | | 9,269,477 | .3100 | 2,873,794.79 | | | 2,873,794.79 |
| | The Peoples Natural Gas Company | 1 | 3,864,104 | .3850 | 1,487,680.07 | 115,923.12 | | 1,371,756.95 |
| | The River Gas Company | 1 | 237,640 | .3500 | 83,174.00 | | | 83,174.00 |
| | Total sales to other gas utilities (affiliated) | 3 | 38,009,416 | | 13,930,353.97 | 115,923.12 | | 13,814,430.85 |
| 605.2 | Sales to other gas utilities (nonaffiliated): | | | | | | | |
| | Fayette County Gas Company | 1 | 840,398 | .3150 | 264,725.41 | | | 264,725.41 |
| | The Manufacturers Light & Heat Company | 1 | 2,500,755 | .3150 | 787,737.85 | | | 787,737.85 |
| | The Northwestern Ohio Natural Gas Co | 1 | 18,200 | .3000 | 5,460.00 | 5,460.00 | | |
| | Other | 3 | 53,058 | | 8,745.59 | | | 8,745.59 |
| | Total sales to other gas utilities (nonaffiliated) | 6 | 3,412,411 | | 1,066,668.85 | 5,460.00 | | 1,061,208.85 |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 608 | Other sales: | | | | | | | |
| | Drillers and pumpers | | | | | | | |
| | Hope Construction and Refining Company | 112 | 380,922 | .2874 | [3] 97,971.65 | 72,387.58 | | 25,583.47 |
| | Gasoline plants | | | | | | | |
| | Exchange gas | 1 | 14,670 | .3000 | 4,403.67 | 4,403.67 | | |
| | South Penn Oil Company | 1 | 113,446 | .1242 | 14,049.50 | [3] 72,387.58 | 48 72,387.58 | 14,049.50 |
| | Total other sales | 114 | 869,047 | | 116,424.22 | 149,178.83 | 72,387.58 | 39,632.97 |
| | Total gas service revenues | 43,000 | 51,361,981 | .3523 | 18,097,145.11 | 270,596.99 | 72,422.62 | 17,898,970.74 |

[1] Volume on contract basis.

[2] Total volume billed to The East Ohio Gas Company was 33,907,672 mcf. According to a study of volumes by the Bureau of Engineering, the actual metered deliveries were 33,275,409 mcf. This difference is due to certain peculiarities in the billing method as provided in the sales contract. The billing is based on metered customers consumption rather than on the actual metered deliveries by Hope Natural Gas Company.

[3] No examiners' reclassification entry was made for this transfer of Hope Construction and Refining Company Exchange Gas from the book classification of "Drillers and Pumpers" to a separate account to segregate for the purpose of this schedule. It represents the exchange of 260,229 mcf of gas.

[Pages 22 to 44 omitted.]

# EXHIBIT NO. 67-A.—COMPARATIVE INCOME STATEMENTS FOR THE YEARS 1937, 1938, AND 1939, VOLUME II, F. P. C. WITNESSES NICHOLS AND REINHARD

[Pages 1 to 23 omitted]

## EXAMINERS' ADJUSTING ENTRIES

### ENTRY NO. 200

| | | Dr. | Cr. |
|---|---|---|---|
| Gas service revenues: | | | |
| 600<br>602.1 | Residential and commercial sales, 1937 | $20,825.01 | |
| | Residential and commercial sales, 1938 | 20,531.21 | |
| 602.2 | Industrial sales, 1937 | 520.58 | |
| | Industrial sales, 1938 | 623.84 | |
| 603 | Public street and highway lighting, 1937 | 6.84 | |
| 604 | Other sales to public authorities, 1937 | 16.85 | |
| | Other sales to public authorities, 1938 | 19.39 | |
| 608 | Other sales, 1937 | 160.07 | |
| | Other sales, 1938 | 134.14 | |
| Other gas revenues: | | | |
| 612 | Customers' forfeited discounts and penalties, 1937 | | $21,339.33 |
| 612 | Customers' forfeited discounts and penalties, 1938 | | 21,310.59 |
| To transfer from gas service revenues to other gas revenues, the amount of customers' forfeited discounts and penalties as determined from an analysis of gas sales for the years 1937 and 1938. | | | |

### ENTRY NO. 201

| | | | |
|---|---|---|---|
| 608.2 | Sales to other gas utilities (non-aff.), 1937 | $920,095.47 | |
| | Sales to other gas utilities (non-aff.), 1938 | 244,603.80 | |
| 734.12 | Gas purchased from others, 1937 | | $771,048.80 |
| | Gas purchased from others, 1938 | | 205,777.80 |
| 764.2 | Joint expenses—Cr., 1937 | | 146,046.87 |
| | Joint expenses—Cr., 1938 | | 38,826.00 |
| To reduce revenues and expenses during the years 1937 and 1938 by the amounts representing gas taken from one subsidiary of Columbia Gas and Electric Corporation (United Fuel Gas Co.) and delivered to another of its subsidiaries (The Manufacturers Light & Heat Co.) at a different location. These transactions are recorded on the books as purchases of gas at one price per Mcf and sales at a price of 5¢ per Mcf in excess of that at which purchased. This differential is represented as a charge for transporting the gas. | | | |
| For the purpose of this report, the purchases and sales have been reduced by the amount of these transactions and the amount represented by 5¢ per Mcf is credited to Joint Expenses—Cr. to offset the costs of handling this gas. | | | |

ENTRY NO. 201—Continued

| | | Dr. | Cr. |
|---|---|---|---|
| 25. | Following is a summary of the purchases and sales as recorded: | | |

| Year | Total Mcf. | Recorded sales | Recorded purchases | Difference |
|---|---|---|---|---|
| 1937 | 2,920,938 | $926,095.47 | $774,048.60 | $146,046.87 |
| 1938 | 776,520 | 244,603.80 | 205,777.80 | 38,826.00 |

The amounts affecting accounts 605.2 and 754.12 are included as an adjustment in Exhibit 37, pages 20, 23, 27 and 30, column 5.

ENTRY NO. 202

| | | | |
|---|---|---|---|
| 605.1 | Sales to other gas utilities (affiliated) 1937 | $105,180.39 | |
| | Sales to other gas utilities (affiliated) 1938 | 86,116.35 | |
| | Sales to other gas utilities (affiliated) 1939 | 115,923.12 | |
| 759.1211 | Pumping station supplies and expenses 1937 | | $105,180.39 |
| | Pumping station supplies and expenses 1938 | | 86,116.35 |
| | Pumping station supplies and expenses 1939 | | 115,923.12 |

To reduce revenues and expenses by the amount paid to The Peoples Natural Gas Co. in consideration for compressing gas sold to that company, under the provisions of the sales contract dated May 8, 1937. Article Eighth of said agreement provides that: "In view of the fact that at the present time gas cannot at all times and as to the full amount required, be delivered by the Hope Company at such pressures, the Peoples Company finds it necessary to recompress all of a part of such gas at its Brave Compressing Station in Greene County, Pennsylvania. The Hope Company therefore agrees that so long as the Peoples Company finds it necessary to maintain such compressing station it will pay the Peoples Company (to be applied in reduction of the price hereinabove provided) the sum of three (3¢) cents per thousand cubic feet of gas delivered hereunder * * *"

The above entry gives effect to the reduction of the price of the gas as provided in the part of the agreement quoted above: Volumes as follows:

| Year | Sales Mcf. | Compressed by Peoples Mcf. |
|---|---|---|
| 1937 | 3,506,013 | 3,506,013 |
| 1938 | 2,870,345 | 2,870,345 |
| 1939 | 3,864,104 | 3,864,104 |

ENTRY NO. 203

| | | | |
|---|---|---|---|
| 608 | Other sales, 1937 | $76,782.24 | |
| 608 | Other sales, 1938 | 74,392.18 | |
| 608 | Other sales, 1939 | 72,387.58 | |
| 754.11 | Natural gas purchased from Aff. Cos., 1937 | | $69,843.29 |
| 754.11 | Natural gas purchased from Aff. Cos., 1938 | | 67,693.70 |
| 754.11 | Natural gas purchased from Aff. Cos., 1939 | | 65,881.85 |
| 764.2 | Joint transmission expenses—Cr., 1937 | | 6,938.95 |
| 764.2 | Joint transmission expenses—Cr., 1938 | | 6,698.48 |
| 764.2 | Joint transmission expenses—Cr., 1939 | | 6,505.73 |

ENTRY NO. 203—Continued

| | Dr. | Cr. |
|---|---|---|
| To reduce revenues and expenses by the amount of gas exchanged with Hope Construction and Refining Company and recorded on the books as purchases and sales of gas. | | |
| The gas delivered to Hope Construction and Refining Company was used by that Company in its oil production operations and returned to Hope Natural Gas Company at reduced pressures. A price differential of 2½¢ per Mcf between the recorded selling price and the repurchase price is regarded as the out-of-pocket expenses for recompressing the gas. | | |
| For the purpose of this report the amount representing the recompressing cost is credited to Joint expenses—Cr. | | |
| Following is a summary of the purchases and sales as recorded: | | |

| Year | Total Mcf. | Total sales amount | Repurchase amount | Difference |
|---|---|---|---|---|
| 1937 | 277,558 | $76,782.24 | $69,843.29 | $6,938.95 |
| 1938 | 267,939 | 74,392.18 | 67,693.70 | 6,698.48 |
| 1939 | 260,229 | 72,387.58 | 65,881.85 | 6,505.73 |

| | | |
|---|---|---|
| The amounts affecting accounts 608 and 754.11 are included as an adjustment in Exhibit 37, pages 20, 23, 27, 30, 34, and 37. | | |

27 ENTRY NO. 204

| | | |
|---|---|---|
| 619.6 Miscellaneous gas revenues—Gas sales contract adjustments, 1938 | $22,274.17 | |
| 619.6 Miscellaneous gas revenues—Gas sales contract adjustments, 1937 | 27,597.24 | |
| 755.2 Gas purchased supplies and expenses, 1938 | | $16,345.41 |
| 755.2 Gas purchased supplies and expenses, 1937 | | 14,212.75 |
| 507 Taxes, 1938 | | 5,928.76 |
| 507 Taxes, 1937 | | 13,384.49 |
| To transfer tax adjustments to the accounts affected during the years 1937 and 1938 by the amount of West Virginia Production and Sales taxes that were billed to others as provided in purchase and sales contracts. Such contracts provide for the sharing by vendors and vendees of taxes imposed on the production and sale of gas. In the case of taxes applicable to purchase contracts, they are herein transferred to Gas Purchase Expense account and thereby netted against certain similar taxes paid to vendors to partially reimburse such vendors for taxes imposed. In the case of taxes applicable to sales contracts, they are herein credited to the Taxes account, thereby reflecting in that account the net amount of taxes imposed on the respondent company for the production and sale of gas in West Virginia. | | |
| The adjustment for the year 1937 includes a refund from the State of West Virginia in the amount of $376.48 for an overassessment. | | |
| These taxes are summarized as follows: | | |
| 1938: | | |
| Taxes billed others on purchase contracts | $16,345.41 | |
| Taxes billed others on sales contracts | 5,928.76 | |
| Total, 1938 | 22,274.17 | |
| 1937: | | |
| Taxes billed others on purchase contracts | 14,212.75 | |
| Taxes billed others on sales contracts | 13,008.01 | |
| Refund from State of West Virginia | 376.48 | |
| Total, 1937 | 27,597.24 | |
| During the year 1939, the taxes billed others on purchase contracts were classified in the same manner as this adjustment. | | |

ENTRY NO. 205

| | Dr. | Cr. |
|---|---|---|
| Gas service revenues, 1939: | | |
| 600 Residential sales | $35.04 | |
| Gas service revenues: | | |
| 602.1 Commercial sales | | $34.78 |
| 602.2 Industrial sales | | .26 |

To adjust the above accounts as shown by the general ledger control accounts so as to agree with the details supporting said accounts as shown in the Company's analysis of gas sales. These differences are represented by Minimum Charges and Service Charges which were apparently posted to the wrong control account. The details are as follows:

| | Details | Sales summary | Difference |
|---|---|---|---|
| Minimum charges: | | | |
| Residential sales | $4,124.96 | $4,160.50 | $35.54 |
| Commercial sales | 1,315.94 | 1,280.66 | 35.28 |
| Industrial sales | 24.18 | 23.92 | .26 |
| Service charges: | | | |
| Residential sales | 4,985.18 | 4,984.68 | .50 |
| Commercial sales | 380.96 | 381.46 | .50 |
| | 10,831.22 | 10,831.22 | |

ENTRY NO. 206

| | Dr. | Cr. |
|---|---|---|
| Gas service revenues, 1939: | | |
| 605.2 Sales to other gas utilities (non-affiliated) | $5,460.00 | |
| 242 Other deferred credits | | $5,460.00 |

To transfer to the latter account, the amount of gas sales to Northwestern Ohio Natural Gas Company on December 30 and 31, 1939. These sales are reflected in the income account of Reserve Gas Co. which was merged with Hope Natural Gas Co. on December 30, 1939. This entry is included as an adjustment in Company Exhibit 37, page 34, column 5.

ENTRY NO. 207

| | Dr. | Cr. |
|---|---|---|
| 146 Other deferred debits, 1939 | $124.77 | |
| 734.12 Gas purchased | | $11.66 |
| 739.11 Compressor station labor | | 113.11 |

Elimination of expenses applicable to Reserve Gas Company which were incurred on December 30 and 31, 1939 after the merger of said Company with Hope Natural Gas Company. This entry is included in Exhibit 37, page 37, column 5.

29 ENTRY NO. 208

| | Dr. | Cr. |
|---|---|---|
| 619.6 Miscellaneous gas revenues—Gas sales, 1939 | $10,768.35 | |
| 507 Contract adjustments taxes, 1939 | | $10,768.35 |
| West Virginia production and sales taxes billed others as provided in sales contracts. These taxes are recorded on the books as miscellaneous gas revenues and this adjustment transfers the credits to the account to which such taxes were charged when paid to the State of West Virginia. | | |
| The sales contracts provide for reimbursement by the vendee for certain taxes imposed on the production and sale of gas. | | |

ENTRY NO. 209

| | | |
|---|---|---|
| 735.2 Gas purchased supplies and expenses, 1938 | $12,280.14 | |
| 735.2 Gas purchased supplies and expenses, 1937 | 10,204.73 | |
| 538 Miscellaneous income deductions, 1938 | | $12,280.14 |
| 538 Miscellaneous income deductions, 1937 | | 10,204.73 |
| West Virginia taxes on production and sales of gas paid to others as provided in certain purchase contracts wherein it is stipulated that the imposition of such taxes will be shared alike by vendor and vendee. The amounts herein represent the respondent company's portion of taxes imposed by the State of West Virginia on certain vendors. | | |
| During the year 1939, the books reflect these taxes in the manner as herein adjusted for the years 1937 and 1938. | | |

ENTRY NO. 210

| | | |
|---|---|---|
| 526 Miscellaneous nonoperating revenues, 1938 | $910.26 | |
| 526 Miscellaneous nonoperating revenues, 1937 | 16,463.51 | |
| Reserve for depreciation of— | | |
| 250.1 Gas plant, 1938 | | $910.26 |
| 250.1 Gas plant, 1937 | | 1,599.52 |
| 512 Abandoned leases, 1937 | | 14,863.99 |
| To transfer from nonoperating revenues, the amounts recorded therein representing book profit on property retired, sold, or abandoned during the years 1937 and 1938. | | |
| The amount credited to account 512 represents a book profit on the sale of unoperated leases. | | |

30 ENTRY NO. 211

| | | |
|---|---|---|
| 619.3 Management fees and expenses, 1939 | $192,415.89 | |
| 619.3 Management fees and expenses, 1938 | 225,451.50 | |
| 619.3 Management fees and expenses, 1937 | 240,382.25 | |
| 733 Operation, supervision & engr., 1939 | | $11,933.66 |
| 733 Operation, supervision & engr., 1938 | | 12,506.73 |
| 733 Operation, supervision & engr., 1937 | | 10,926.21 |
| 734.3 Field meas. & reg. stat. labor, 1939 | | 628.83 |
| 734.3 Field meas. & reg. stat. labor, 1938 | | 1,283.61 |
| 734.3 Field meas. & reg. stat. labor, 1937 | | 1,023.17 |
| 734.4 Other production labor, 1939 | | 3,608.87 |
| 734.4 Other production labor, 1938 | | 17,517.61 |
| 734.4 Other production labor, 1937 | | 15,607.85 |
| 734.4 Other supplies and expenses, 1937 | | 183.11 |
| 737 Production maps and records, 1939 | | 244.08 |
| 739 Maint. supervision & engr., 1939 | | 126.11 |

ENTRY NO. 211—Continued

| | | Dr. | Cr. |
|---|---|---|---|
| 741 | Maint. of prod. gas well equipt., 1939 | | $516.37 |
| 741 | Maint. of prod. gas well equipt., 1938 | | 436.74 |
| 755.1 | Purchased gas operating labor, 1939 | | 5,823.11 |
| 755.1 | Purchased gas operating labor, 1938 | | 7,168.28 |
| 755.1 | Purchased gas operating labor, 1937 | | 6,132.40 |
| 755.2 | Purchased gas supplies & expenses, 1939 | | 32.27 |
| 755.2 | Purchased gas supplies & expenses, 1938 | | 890.72 |
| 755.2 | Purchased gas supplies & expenses, 1937 | | 844.65 |
| 758 | Operation, supervision & engr., 1939 | | 1,815.39 |
| 758 | Operation, supervision & engr., 1938 | | 2,513.48 |
| 758 | Operation, supervision & engr., 1937 | | 1,787.08 |
| 759.111 | Pumping station labor, 1939 | | 1,144.94 |
| 759.24 | Other transmission system exp., 1939 | | 2,286.83 |
| 759.24 | Other transmission system exp., 1938 | | 6,984.34 |
| 759.24 | Other transmission system exp., 1927 | | 2,441.38 |
| 760 | Maintenance, supervision & engr., 1939 | | 14.56 |
| 762.21 | Maint. of pumping station equipt., 1939 | | 1,523.75 |
| 762.21 | Maint. of pumping station equipt., 1938 | | 21.43 |
| 765 | Operation, supervision & engr., 1939 | | 26.16 |
| 765 | Operation, supervision & engr., 1938 | | 54.00 |
| 765 | Operation, supervision & engr., 1937 | | 34.39 |
| 769 | Services on customers' premises, 1939 | | 103.53 |
| | Other distribution system labor, 1938 | | 330.22 |
| 771 | Maintenance, supervision & engr., 1939 | | 24.48 |
| 779 | Supervision, 1939 | | 331.83 |
| 780.4 | Collecting, 1939 | | 244.44 |
| 781 | Customers' billing & accounting, 1939 | | 1,009.66 |
| 781 | Customers' billing & accounting, 1938 | | 1,240.87 |
| 781 | Customers' billing & accounting, 1937 | | 65.04 |
| 782 | Miscellaneous expenses, 1939 | | 426.70 |
| 790 | Salaries of general off. & exec., 1939 | | 20,022.51 |
| 790 | Salaries of general off. & exec., 1938 | | 26,505.85 |
| 790 | Salaries of general off. & exec., 1937 | | 32,188.68 |
| 791 | Other general office salaries, 1939 | | 95,348.90 |
| 791 | Other general office salaries, 1938 | | 96,782.51 |
| 791 | Other general office salaries, 1937 | | 106,321.51 |
| 792.2 | Expenses of general off. employees, 1938 | | 118.26 |
| 793 | General office supplies & expenses, 1939 | | 2,957.12 |
| 793 | General office supplies & expenses, 1938 | | 586.85 |
| 793 | General office supplies & expenses, 1937 | | 1,077.87 |
| 795 | Special services, 1938 | | 10,925.85 |
| 795 | Special services, 1937 | | 10,818.70 |
| 800.1 | Employees' welfare expenses, 1939 | | 15,101.43 |
| 800.1 | Employees' welfare expenses, 1938 | | 16,570.92 |
| 800.1 | Employees' welfare expenses, 1937 | | 24,871.22 |
| 801 | Miscellaneous general expenses, 1939 | | 11,962.57 |
| 801 | Miscellaneous general expenses, 1938 | | 285.13 |
| 801 | Miscellaneous general expenses, 1937 | | 411.66 |
| 802.2 | Maintenance of office furn. & equipt., 1938 | | 13.61 |
| 802.3 | Maintenance of communication equipt., 1938 | | 2,848.93 |
| 802.3 | Maintenance of communication equipt., 1937 | | 6,572.03 |
| 803 | Rents, 1939 | | 15,137.77 |
| 803 | Rents, 1938 | | 14,941.25 |
| 803 | Rents, 1937 | | 19,075.30 |
| 902 | Stores expenses—Clearing, 1938 | | 801.61 |
| 903.1 | Transportation expenses—Clearing, 1938 | | 4,122.73 |

ENTRY NO. 211—Continued

| | Dr. | Cr. |
|---|---|---|
| To adjust the above operating revenue and expense accounts in order that the actual net expense be reflected. These management fees and expenses have been charged to the following associated companies: | | |
| Hope Construction and Refining Company. | | |
| Reserve Gas Company. | | |
| The Peoples Natural Gas Company. | | |
| New York State Natural Gas Corporation. | | |
| Keuka Construction Company. | | |

32 ENTRY NO. 212

| | | | |
|---|---|---|---|
| 146 | Other deferred debits, 1939 | $543,121.12 | |
| | Other deferred debits, 1938 | 53,683.57 | |
| | Other deferred debits, 1937 | 1,648.91 | |
| 797 | Regulatory commission expenses, 1939 | | $315,066.86 |
| 801 | Miscellaneous general expenses, 1939 | | 228,054.26 |
| 734.4 | Other production labor, 1938 | | 496.88 |
| 735.4 | Other production supplies and expenses, 1938 | | 213.86 |
| 759.24 | Other transmission system expenses, 1938 | | 121.50 |
| 791 | Other general office salaries, 1938 | | 20,627.67 |
| 792.1 | Expenses of general officers, 1938 | | 13.80 |
| 792.2 | Expenses of general office employees, 1938 | | 217.74 |
| 793 | General office supplies and expenses, 1938 | | 749.31 |
| 795 | Special services, 1938 | | 28,548.29 |
| 796 | Special legal services, 1938 | | 42.55 |
| 801 | Miscellaneous general expenses, 1938 | | 344.66 |
| 802.2 | Maintenance of office furniture and equipment, 1938 | | 11.00 |
| 803 | Rents, 1938 | | 2,164.40 |
| 903.1 | Transportation expenses—clearing, 1938 | | 161.47 |
| 903.2 | Clarksburg garage—suspense, 1938 | | 23.44 |
| 538 | Miscellaneous income deductions, 1937 | | 1,648.91 |
| To suspend the expenditures incurred during the years 1937, 1938, and 1939, that relate to the company's reclassification of property accounts, River-Rate investigation and Cleveland Rate Case. They are transferred to other deferred debits pending final disposition by the Commission.* | | | |

| Year | Reference | Description | Amount |
|---|---|---|---|
| 1937 | | Cleveland Rate case | $1,648.91 |
| 1938 | Sundry voucher | River Rate case | 1,532.57 |
| 1938 | Sundry voucher | Property reclassification | 52,151.00 |
| 1939 | M 348 | River Rate case | 315,066.86 |
| 1939 | M 350 | Property reclassification | 228,054.26 |
| | Total | | 598,453.60 |

*This entry is included in the company's exhibit 37, pages 26, 29, 31, and 38, column 5, with minor exceptions to amounts involved.

ENTRY NO. 213

| | | Dr. | Cr. |
|---|---|---|---|
| 126.2 | Receivables from associated companies: | | |
| | Hope Construction and Refining Company, 1939 | $117,640.58 | |
| | Hope Construction and Refining Company, 1938 | 127,771.12 | |
| | Hope Construction and Refining Company, 1937 | 138,144.22 | |
| 608 | Other sales, 1939 | 4,403.67 | |
| 608 | Other sales, 1938 | 2,196.60 | |
| 608 | Other sales, 1937 | 4,286.10 | |
| | | | $122,044.25 |
| 739.1212 | Pumping station—Fuel, 1939 | | 129,967.72 |
| 739.1212 | Pumping station—Fuel, 1938 | | 142,430.32 |
| 739.1212 | Pumping station—Fuel, 1937 | | |
| | To charge Hope Construction and Refining Company with the value placed on steam and gas furnished gasoline plants for extraction purposes, taking into consideration the vent gas returned to Hope Natural Gas Company and concurrently crediting the operating expense account affected. See gasoline extraction study for details of Entries No. 213 to 217, incl. | | |

ENTRY NO. 214

| | | | |
|---|---|---|---|
| 617.1 | Revenue from Processing Nat. Gas-Cont. Gas, 1939 | $60,848.62 | |
| 617.1 | Revenue from Processing Nat. Gas-Cont. Gas, 1938 | 58,593.34 | |
| 617.1 | Revenue from Processing Nat. Gas-Cont. Gas, 1937 | 82,076.76 | |
| 617.2 | Revenue from Processing Nat. Gas-Butane Gas, 1939 | 25,915.65 | |
| 617.2 | Revenue from Processing Nat. Gas-Butane Gas, 1938 | 16,990.54 | |
| 617.2 | Revenue from Processing Nat. Gas-Butane Gas, 1937 | 23,559.07 | |
| 126.2 | Receivables from associated companies: | | |
| | Hope Construction and Refining Company, 1939 | | $86,764.27 |
| | Hope Construction and Refining Company, 1938 | | 75,583.88 |
| | Hope Construction and Refining Company, 1937 | | 105,635.83 |
| | To credit Hope Construction and Refining Company with the value per books representing royalties from one-eighth of the gross receipts from sale of gasoline and butane extracted from Hope Natural Gas Company's gas and accordingly reversing the revenue accounts affected. | | |

34 ENTRY NO. 215

| | | | |
|---|---|---|---|
| 126.2 | Receivables from associated companies: | | |
| | Hope Construction and Refining Company, 1939 | $892,706.83 | |
| | Hope Construction and Refining Company, 1938 | 678,035.37 | |
| | Hoep Construction and Refining Company, 1937 | 979,829.94 | |
| | | | $892,706.83 |
| 747.1 | Residuals Produced—Credit, 1939 | | 678,035.37 |
| 747.1 | Residuals Produced—Credit, 1938 | | 979,829.94 |
| 747.1 | Residuals Produced—Credit, 1937 | | |
| | To record in residuals produced account the revenue from sales of gasoline and butane that were extracted from natural gas of Hope Natural Gas Company and charge Hope Construction and Refining Company as the recipient of these products. | | |

ENTRY NO. 216

| | Dr. | Cr. |
|---|---|---|
| 747.2 Residuals Operating Expenses, 1939 | $568,523.17 | |
| 747.2 Residuals Operating Expenses, 1938 | 477,321.37 | |
| 747.2 Residuals Operating Expenses, 1937 | 566,156.05 | |
| 126.2 Receivables from associated companies: | | |
| Hope Construction and Refining Company, 1939 | | $568,513.17 |
| Hope Construction and Refining Company, 1938 | | 477,312.37 |
| Hope Construction and Refining Company, 1937 | | 566,156.05 |
| To record in residuals produced operation account the expenses incident to production and sale of gasoline and butane that were incurred by Hope Construction and Refining Company. | | |

ENTRY NO. 217

| | | |
|---|---|---|
| 747.2 Residuals Operating Expenses, 1939 | $38,593.66 | |
| 747.2 Residuals Operating Expenses, 1938 | 40,270.67 | |
| 747.2 Residuals Operating Expenses, 1937 | 45,667.89 | |
| 126.2 Receivables from associated companies. | | |
| Hope Construction and Refining Company, 1939 | | $38,593.66 |
| Hope Construction and Refining Company, 1938 | | 40,270.67 |
| Hope Construction and Refining Company, 1937 | | 45,667.89 |
| To record in residuals produced operation account the return on investment allowed Hope Construction and Refining Company based on 6% of average investment for the years 1937, 1938, and 1939. | | |

35 ENTRY NO. 218

| | | |
|---|---|---|
| 538 Miscellaneous income deductions, 1939 | $147,933.49 | |
| 538 Miscellaneous income deductions, 1938 | 159,520.47 | |
| 538 Miscellaneous income deductions, 1937 | 174,172.94 | |
| 754.11 Natural gas purchased from aff. cos., 1939 | | $147,933.49 |
| 754.11 Natural gas purchased from aff. cos., 1938 | | 159,520.47 |
| 754.11 Natural gas purchased from aff. cos., 1937 | | 174,172.94 |
| To eliminate the balance recorded as cost of natural gas purchased from Hope Construction and Refining Company, this balance being amount remaining in account 754.11 after giving effect of the Adjustment (A) shown in the Company's Exhibit No. 37. Details as follows: | | |

| | MCF | | |
|---|---|---|---|
| | 1939 | 1938 | 1937 |
| Contract No. 456 | 1,098,952 | 1,125,862 | 1,300,736 |
| Exchange gasa dj.* | *260,229* | *267,939* | *277,558* |
| Contr. No. 456 (net) | 838,723 | 857,923 | 1,023,178 |
| Contr. No. 676 | 25,441 | 63,007 | |
| MCF subject to adjustment | 864,164 | 920,930 | 1,023,178 |

See footnote on page 267.

Italic figures denote decrease.

ENTRY NO. 218—Continued

| | Value | | | Dr. | Cr. |
|---|---|---|---|---|---|
| | 1939 | 1938 | 1937 | | |
| Purchases | $147,933.49 | $159,520.47 | $174,172.94 | | |
| Exchange gas | 65,881.85 | 67,693.70 | 69,843.29 | | |
| Total per books | 213,815.34 | 227,214.17 | 244,016.23 | | |
| Exchange gas adj* | *65,881.85* | *67,693.70* | *69,843.29* | | |
| Value subject to adjustment | 147,933.49 | 159,520.47 | 174,172.94 | | |

36 ENTRY NO. 219

| | | Dr. | Cr. |
|---|---|---|---|
| 734.11 | Natural gas purchased from aff. co's., 1939 | $103,699.68 | |
| 734.11 | Natural gas purchased from aff. co's., 1938 | 110,511.60 | |
| 734.11 | Natural gas purchased from aff. co's., 1937 | 122,781.36 | |
| 538 | Miscellaneous income deductions, 1939 | | $103,699.68 |
| 538 | Miscellaneous income deductions, 1938 | | 110,511.60 |
| 538 | Miscellaneous income deductions, 1937 | | 122,781.36 |
| To reinstate the amount computed as cost of natural gas purchased from Hope Construction and Refining Company, based on the unit price that was recommended by the Bureau of Engineering. Details as follows: | | | |

| | 1939 | 1938 | 1937 |
|---|---|---|---|
| Total MCF | 864,164 | 920,930 | 1,023,178 |
| Unit price | .12 | .12 | .12 |
| Amount | $103,699.68 | $110,511.60 | $122,781.36 |

ENTRY NO. 220

| | | Dr. | Cr. |
|---|---|---|---|
| 538 | Miscellaneous income deductions, 1939 | $247,744.26 | |
| 538 | Miscellaneous income deductions, 1938 | 245,975.58 | |
| 538 | Miscellaneous income deductions, 1937 | 297,328.14 | |
| 739.1212 | Pumping station fuel, 1939 | | $247,744.26 |
| 734.21 | Other gas purchased from aff. co's., 1938 | | 245,975.58 |
| 734.21 | Other gas purchased from aff. co's., 1937 | | 297,328.14 |
| To eliminate from the Operating Expenses of the Company charges made by Domestic Coke Corporation for coke oven gas used at the Hastings and Gallagher Stations. This entry is in accord (**) with Company's Exhibit No. 37, pages 23, 40, and 37, column 5. Details as follows: | | | |

*NOTE.—See Examiners' Entry No. 203 adjusting this Exchange Gas transaction, by eliminating the sale of gas to Hope Construction and Refining Company and the repurchase by the Hope Natural Gas Company, which entry to this point, is in accord with Company Exhibit 37, Adjustment (A)

**Incorrect amount computed for use in Exhibit 37—above entry adjusts this error.

Italic figures denote decrease.

ENTRY NO. 220—Continued

| | MCF | | | Dr. | Cr. |
|---|---|---|---|---|---|
| | 1939 | 1938 | 1937 | | |
| Hastings Stat | 1,077,577 | 989,878 | 1,188,495 | | |
| Gallagher Stat | 298,780 | 376,653 | 463,328 | | |
| Total MCF | 1,376,357 | 1,366,531 | 1,651,823 | | |
| At $0.18 | $247,744.26 | $245,975.58 | $297,328.14 | | |
| Difference (**) | 4,616.98 | | | | |
| Total per books | 252,361.24 | 245,975.58 | 297,328.14 | | |

37 ENTRY NO. 221

| | | | |
|---|---|---|---|
| 749 | Duplicate charges—Credit, 1938 | $289,448.53 | |
| 749 | Duplicate charges—Credit, 1937 | 345,965.68 | |
| 759.1212 | Pumping station fuel, 1938 | | $289,448.53 |
| 759.1212 | Pumping station fuel, 1937 | | 345,965.68 |

To reverse entries recording the coke oven gas used at Hastings and Gallagher stations in order to conform to the 1939 classification, this being in accord with Company's Exhibit No. 37, Adjustment pages 23, 26, 30, and 33, column 5. Details as follows:

| | 1938 | 1937 |
|---|---|---|
| Hastings station | $77,588.30 | $92,122.20 |
| Gallagher station | 211,860.23 | 253,843.48 |
| Total | 289,448.53 | 345,965.68 |

ENTRY NO. 222

| | | | |
|---|---|---|---|
| 538 | Miscellaneous income deductions, 1939 | $30,959.03 | |
| 538 | Miscellaneous income deductions, 1938 | 26,246.12 | |
| 538 | Miscellaneous income deductions, 1937 | 27,030.40 | |
| 759.111 | Pumping station—Labor, 1939 | | $19,315.78 |
| 759.111 | Pumping station—Labor, 1938 | | 19,280.64 |
| 759.111 | Pumping station—Labor, 1937 | | 19,046.34 |
| 759.1211 | Pumping station—Supplies & exp., 1939 | | 3,306.64 |
| 759.1211 | Pumping station—Supplies & exp., 1938 | | 1,744.86 |
| 759.1211 | Pumping station—Supplies & exp., 1937 | | 2,416.51 |
| 761.1 | Maint. of pumping stat.—Struct., 1939 | | 2,082.75 |
| 761.1 | Maint. of pumping stat.—Struct., 1938 | | 2,865.71 |
| 761.1 | Maint. of pumping stat.—Struct., 1937 | | 4,897.54 |
| 762.21 | Maint. of pumping stat.—Equipt., 1939 | | 6,053.86 |
| 762.21 | Maint. of pumping stat.—Equipt., 1938 | | 2,334.91 |
| 762.21 | Maint. of pumping stat.—Equipt., 1937 | | 670.01 |

To eliminate from operating expenses the direct costs arising from the transportation of coke oven gas to Hastings station. This entry is in accord with Company's Exhibit No. 37, pages 23, 30 and 37, column 5.

(**) Incorrect amount computed for use in Exhibit 37—above entry adjusts this error.

| | | Dr. | Cr. |
|---|---|---|---|
| 538 | Miscellaneous income deductions, 1939 | $16,454.64 | |
| 538 | Miscellaneous income deductions, 1938 | 17,104.35 | |
| 538 | Miscellaneous income deductions, 1937 | 18,311.29 | |
| 734.2 | Field line labor, 1939 | | $514.71 |
| 734.2 | Field line labor, 1938 | | 374.07 |
| 734.2 | Field line labor, 1937 | | 394.62 |
| 735.2 | Field line supplies & expenses, 1939 | | 81.73 |
| 735.2 | Field line supplies & expenses, 1938 | | 29.61 |
| 734.2 | Field line supplies & expenses, 1937 | | 28.98 |
| 734.3 | Field meas. & reg. station labor, 1939 | | 685.18 |
| 734.3 | Field meas. & reg. station labor, 1938 | | 811.26 |
| 734.3 | Field meas. & reg. station labor, 1937 | | 746.58 |
| 735.3 | Field meas. & reg. station suppl. & exp., 1939 | | 157.62 |
| 735.3 | Field meas. & reg. station suppl. & exp., 1938 | | 100.17 |
| 735.3 | Field meas. & reg. station suppl. & exp., 1937 | | 157.62 |
| 759.21 | Operation of trans. mains—Labor, 1939 | | 1,607.53 |
| 759.21 | Operation of trans. mains—Labor, 1938 | | 702.09 |
| 759.21 | Operation of trans. mains—Labor, 1937 | | 728.17 |
| 759.22 | Operation of trans. mains—Supp. & exp., 1939 | | 153.53 |
| 759.22 | Operation of trans. mains—Supp. & exp., 1938 | | 95.09 |
| 759.22 | Operation of trans. mains—Supp. & exp., 1937 | | 114.82 |
| 762.1 | Maintenance of mains, 1939 | | 1,083.09 |
| 762.1 | Maintenance of mains, 1938 | | 2,004.70 |
| 762.1 | Maintenance of mains, 1937 | | 2,964.62 |
| 802.3 | Maint. of communication equipt., 1939 | | 848.70 |
| 802.3 | Maint. of communication equipt., 1938 | | 1,847.19 |
| 802.3 | Maint. of communication equipt., 1937 | | 1,907.06 |
| 507 | Taxes, 1939 | | 11,322.55 |
| 507 | Taxes, 1938 | | 11,140.17 |
| 507 | Taxes, 1937 | | 11,258.82 |

To eliminate from operating expenses additional expenses and taxes applicable to the transportation of coke oven gas not eliminated in Company Exhibit 37. These expenses were determined by first computing the ratio of property costs used for transportation of coke oven gas to the total property cost in each of the property accounts removed from the rate base, and then using the same ratio to the over-all operating expenses applicable to the operation and maintenance of said property. Details in statement attached.

39 ***Statement of adjustments to operating expenses and taxes related to the original cost of property used to transport coke-oven gas from Domestic Coke Corporation that were eliminated from the rate base and omitted in Exhibit No. 37***

| Property account number | Original cost of property | | Ratio | Oper. exp. acc't No. | Year | Total oper. exps. | Ratio applied | Amount of adjustment |
|---|---|---|---|---|---|---|---|---|
| | Total | Used to trans. coke oven gas | | | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| 333.1 | $11,296,741.40 | $50,476.43 | 0.004468 | 734.2 | 1939 | $115,199.83 | 0.004468 | $514.71 |
| 333.1 | | | | 734.2 | 1938 | 83,722.09 | .004468 | 374.07 |
| 333.1 | | | | 734.2 | 1937 | 88,321.52 | .004468 | 394.62 |
| 333.1 | | | | 735.2 | 1939 | 18,292.54 | .004468 | 81.73 |
| 333.1 | | | | 735.2 | 1938 | 6,627.83 | .004468 | 29.61 |
| 333.1 | | | | 735.2 | 1937 | 6,485.49 | .004468 | 28.98 |
| 333.2 | 184,385.03 | 10,087.67 | .054710 | 734.3 | 1939 | 12,523.85 | .054710 | 685.18 |
| 333.2 | | | | 734.3 | 1938 | 14,828.39 | .054710 | 811.26 |
| 333.2 | | | | 734.3 | 1937 | 13,646.14 | .054710 | 746.56 |
| 333.2 | | | | 735.3 | 1939 | 2,881.05 | .054710 | 157.62 |
| 333.2 | | | | 735.3 | 1938 | 1,831.01 | .054710 | 100.17 |
| 333.2 | | | | 735.3 | 1937 | 21,422.67 | .054710 | 157.62 |
| 353 | 14,132,074.72 | 202,275.72 | .020682 | 759.21 | 1939 | 77,725.82 | .020682 | 1,607.53 |
| 353 | | | | 759.21 | 1938 | 33,946.92 | .020682 | 702.09 |
| 353 | | | | 759.21 | 1937 | 35,691.38 | .020682 | 738.17 |
| 353 | | | | 759.22 | 1939 | 7,423.49 | .020682 | 153.53 |
| 353 | | | | 759.22 | 1938 | 4,597.90 | .020682 | 95.09 |
| 353 | | | | 759.22 | 1937 | 5,551.59 | .020682 | 114.82 |
| 353 | | | | 762.1 | 1939 | 52,368.82 | .020682 | 1,083.09 |
| 353 | | | | 762.1 | 1938 | 96,929.87 | .020682 | 2,004.70 |
| 353 | | | | 762.1 | 1937 | 143,343.00 | .020682 | 2,963.62 |
| 378 | 248,975.74 | 5,626.43 | .022598 | 802.3 | 1939 | 37,556.52 | .022598 | 848.70 |
| 378 | | | | 802.3 | 1938 | 81,741.36 | .022598 | 1,847.19 |
| 378 | | | | 802.3 | 1937 | 84,390.53 | .022598 | 1,907.06 |
| 100.1 | 51,207,620.64 | 762,592.06 | .014892 | 507 | 1939 | 760,310.91 | .014892 | 11,322.55 |
| 100.1 | | | | 507 | 1938 | 748,064.33 | .014892 | 11,140.17 |
| 100.1 | | | | 507 | 1937 | 756,031.50 | .014892 | 11,258.82 |

40 *Examiners' adjusting entries*

ENTRY NO. 224

| | | Dr. | Cr. |
|---|---|---|---|
| 792 1212 | Pumping station fuel, 1939 | $58,781.83 | |
| 739 | Pumping station fuel, 1938 | 53,997.84 | |
| 739 | Pumping station fuel, 1937 | 64,832.40 | |
| 528 | Miscellaneous income deductions, 1939 | | $58,781.83 |
| 528 | Miscellaneous income deductions, 1938 | | 53,997.84 |
| 528 | Miscellaneous income deductions, 1937 | | 64,832.40 |

To reinstate in the operating expenses of the Company, the value of coke oven gas used at Hastings Station for boiler fuel.

This coke oven gas, supplied by Domestic Coke Corporation, has a heating value of slightly over 500 B. T. U., and natural gas having a heating value of about 1100 B. T. U., it is therefore determined that 5/11 of $.12, which price was recommended by the Bureau of Engineering, is to be used in arriving at the cost of the coke oven gas.

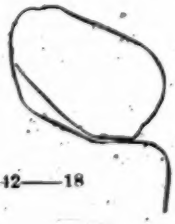
| | 1939 | 1938 | 1937 |
|---|---|---|---|
| MCF | 1,077,577 | 989,878 | 1,188,495 |
| Unit price | .05455 | .05455 | .05455 |
| Cost | $58,781.83 | $53,997.84 | $64,832.40 |

ENTRY NO. 225

| | | Dr. | Cr. |
|---|---|---|---|
| 132 | Prepayments (prepaid taxes) | $14,500.00 | |
| 228 | Taxes accrued—December 31, 1939 | | $14,500.00 |

To increase Federal capital stock tax for the period Jan. 1, 1940 to June 30, 1940 from $13,000 (amount shown per books) to $27,500. The latter amount represents one-half the amount of $55,000 reported in the tax return for the fiscal year July 1, 1939 to June 30, 1940.

Although this tax is not paid, the policy of the Company is to accrue the entire amount of estimated taxes for the fiscal year and at the end of the calendar year, charge one-half to operating taxes and the other half to prepaid taxes.



41 ENTRY NO. 226

| | | | Dr. | Cr. |
|---|---|---|---|---|
| 507 Taxes, 1939 | | | $1,045.50 | |
| 228 Taxes accrued, Dec. 31, 1939 | | | | $1,045.50 |
| Underaccrual of the following taxes: | | | | |
| Federal unemployment: | | | | |
| Paid in 1940 | $11,735.78 | | | |
| Accrued per books | 11,022.61 | | | |
| Underaccrued | | $713.17 | | |
| Penna. net income: | | | | |
| Paid in 1940 | 3,986.52 | | | |
| Accrued per books | 3,200.00 | | | |
| Examiners' adj. #228 | 454.19 | | | |
| Adjusted accrual | 3,654.19 | | | |
| Underaccrued | | 332.33 | | |
| Total underaccrual | | 1,045.50 | | |

ENTRY NO. 227

| | | | | |
|---|---|---|---|---|
| 271 Earned surplus, Jan. 1, 1939 | | | $23,348.93 | |
| 507 Taxes, 1939 | | | | $23,348.93 |
| Taxes paid in 1939 and charged to 1939 operations applicable to prior years. | | | | |
| *Kind of tax* | | *Amount* | | |
| Federal unemployment, 1936 | | $238.39 | | |
| Federal unemployment, 1937 | | 658.19 | | |
| Federal unemployment, 1938 | | 747.07 | | |
| W. Va. real and personal, 1936 | | 14.95 | | |
| W. Va. real and personal, 1937 | | 9.21 | | |
| W. Va. real and personal, 1938 | | 20.86 | | |
| Penna. unemployment, 1936 | | 366.41 | | |
| Penna. unemployment, 1937 | | 770.51 | | |
| Penna. unemployment, 1938 | | 908.40 | | |
| W. Va. unemployment, 1936 | | 2,376.05 | | |
| W. Va. unemployment, 1937 | | 5,153.24 | | |
| W. Va. unemployment, 1938 | | 5,815.34 | | |
| Federal old-age, 1937 | | 1,749.21 | | |
| Federal old-age, 1938 | | 1,749.20 | | |
| Penna. net income, 1937 | | 382.98 | | |
| Penna. net income, 1938 | | *12.99* | | |
| Penna. foreign corporation, 1937 | | 2,022.83 | | |
| Penna. foreign corporation, 1938 | | 32.05 | | |
| W. Va. gross sales, 1938 | | *4.99* | | |
| Federal capital stock, 1938 | | 352.00 | | |
| Total | | 23,348.95 | | |

Italic figures denote decrease

ENTRY NO. 228

| | Dr. | Cr. |
|---|---|---|
| 307 Taxes, 1939 | $15,518.44 | |
| 228 Taxes accrued, Dec. 31, 1939 | | $15,518.44 |

Underaccrual of the following taxes for the year 1939, paid in 1940:

| *Kind of tax* | *Amount* |
|---|---|
| W. Va. sales tax | $564.25 |
| Federal capital stock tax | 14,500.00 |
| Penna. income tax | 454.19 |
| Total | 15,518.44 |

ENTRY NO. 229

| | Dr. | Cr. |
|---|---|---|
| 228 Taxes accrued, Dec. 31, 1939 | $33,495.33 | |
| 307 Taxes, 1939 | | $33,495.33 |

Overaccrual of the following taxes for the year 1939, paid in 1940:

| *Kind of tax* | *Amount* |
|---|---|
| Federal income tax | $33,479.04 |
| Penna. foreign corp. franchise | 16.29 |
| Total | 33,495.33 |

ENTRY NO. 230

| | Dr. | Cr. |
|---|---|---|
| 271 Earned surplus, Jan. 1, 1937 | $66,194.77 | |
| 228 Taxes accrued, Dec. 31, 1937 | | $25,320.40 |
| 307 Taxes, 1937 | | 40,874.37 |

Net underaccrual of taxes charged to operations in 1937 and subsequent years as follows:

| Kind of tax | Year | Year paid | Amount |
|---|---|---|---|
| Wetzel Co. property | 1935 | 1938 | $7.08 |
| Wetzel Co. property | 1936 | 1938 | 7.08 |
| Penna. net income | 1935 | 1938 | 3,609.67 |
| Penna. net income | 1936 | 1938 | 7,657.00 |
| Penna. foreign fran | 1935 | 1938 | 5,379.72 |
| Penna. foreign fran | 1936 | 1938 | 5,664.05 |
| Federal unemployment | 1936 | 1939 | 238.39 |
| W. Va. real & personal | 1936 | 1939 | 14.95 |
| Penna. unemployment | 1936 | 1939 | 366.41 |
| W. Va. unemployment | 1936 | 1939 | 2,376.05 |
| Total Cr. taxes accrued | | | 25,320.40 |

ENTRY NO. 230—Continued

| 43 Kind of tax | Year | Year paid | Amount | Dr. | Cr. |
|---|---|---|---|---|---|
| Federal income | 1936 | 1937 | | | |
| Federal capital stock | 1936 | 1937 | $20.00 | | |
| Federal unemployment | 1936 | 1937 | 3.59 | | |
| Penna. net income | 1936 | 1937 | 171.74 | | |
| W. Va. gross sales | 1936 | 1937 | *888.46* | | |
| W. Va. gross sales | 1936 | 1937 | 20,096.87 | | |
| W. Va. gross sales | 1936 | 1937 | 14,768.32 | | |
| W. Va. gross sales | 1934 | 1937 | 6,202.99 | | |
| W. Va. gross sales | 1933 | 1937 | 1,309.38 | | |
| W. Va. unemployment | 1936 | 1937 | 1.64 | | |
| Penna. foreign fran | 1936 | 1937 | *871.70* | | |
| Total Cr. taxes | | | 40,874.37 | | |
| Total | | | 66,194.77 | | |

ENTRY NO. 231

| | | | Dr. | Cr. |
|---|---|---|---|---|
| 228 Taxes accrued, December 31, 1937 | | | $37,006.20 | |
| 507 Taxes, other, 1937 | | | 679.27 | |
| 507 Taxes, Federal income, 1937 | | | | $37,685.47 |
| Adjustment of taxes accrued, 1937 as follows: | | | | |
| Kind of tax | Year paid | Amount | | |
| Federal income tax | 1938 | *$37,685.47* | | |
| Federal capital stock tax | 1938 | *2,250.00* | | |
| Federal unemployment | 1939 | 658.19 | | |
| Federal old age insurance | 1939 | 1,749.21 | | |
| W. Va. general property | 1939 | 9.21 | | |
| Penna. corp. net income | 1938–39 | *6,922.46* | | |
| Gross sales & income, W. Va. | 1938 | 142.82 | | |
| Penna. unemployment comp | 1939 | 770.51 | | |
| W. Va. unemployment comp | 1939 | 5,153.24 | | |
| Penna. foreign franchis | 1938–39 | 1,368.55 | | |
| Total | | *$37,006.20* | | |

Italic figures denote decrease.

44 ENTRY NO. 232

| | Dr. | Cr. |
|---|---|---|
| 271 Earned surplus, Jan. 1, 1938 | $25,320.40 | |
| 228 Taxes accrued, Dec. 31, 1938 | | $2,995.80 |
| 507 Taxes, 1938 | | 22,324.60 |

Net underaccrual of taxes charged to operations in 1938 and subsequent years as follows:

| Kind of tax | Year paid | Amount |
|---|---|---|
| Wetzel Co. property tax, 1935 | 1938 | $7.08 |
| Wetzel Co. property tax, 1936 | 1938 | 7.08 |
| Penna. net income, 1935 | 1938 | 3,609.67 |
| Penna. net income, 1936 | 1938 | 7,657.00 |
| Penna. foreign franchise, 1935 | 1938 | 5,379.72 |
| Penna. foreign franchise, 1936 | 1938 | 5,664.05 |
| Federal unemployment, 1936 | 1939 | 238.39 |
| W. Va. real and personal, 1936 | 1939 | 14.95 |
| Penna. unemployment, 1936 | 1939 | 366.41 |
| W. Va. unemployment, 1936 | 1939 | 2,376.05 |
| Total Dr. surplus | | $25,320.40 |

ENTRY NO. 233

| | Dr. | Cr. |
|---|---|---|
| 271 Earned surplus, Jan. 1, 1938 | $679.27 | |
| 507 Taxes, 1938 | 10,066.90 | |
| 228 Taxes accrued, Dec. 31, 1938 | | $10,746.17 |

Adjustment of taxes and taxes accrued at Dec. 31, 1938. 1937 taxes adjusted in 1938 and 1939 as follows:

| Kind of tax | Year paid | Amount |
|---|---|---|
| Fed. capital stock, overaccrued | 1938 | *$2,250.00* |
| Federal unemployment | 1939 | 658.19 |
| Federal old age | 1939 | 1,749.21 |
| W. Va. general property | 1939 | 9.21 |
| Penna. Corp. net income, overaccr | 1938 | 7,305.44 |
| Penna. Corp. net income | 1939 | 382.98 |
| Gross sales and income, W. Va | 1938 | 142.82 |
| Penna. unemployment comp | 1939 | 779.51 |
| W. Va. unemployment comp | 1939 | 3,153.24 |
| Penna. foreign fran., overaccr | 1938 | *654.28* |
| Penna. foreign fran | 1939 | 2,022.83 |
| Total | | 679.27 |

Italic figures denote decrease.

| | | Dr. | Cr. |
|---|---|---|---|
| 807 Taxes, Federal income 1938 | | $7,514.67 | |
| 228 Taxes accrued, Dec. 31, 1938 | | | $7,514.67 |
| Underaccrual of Federal income tax for the year 1938. Charged to surplus in 1939: | | | |
| Accrued | $10,000.00 | | |
| Paid | 17,514.67 | | |
| Underaccrued | 7,514.67 | | |

ENTRY NO. 235

| | | Dr. | Cr. |
|---|---|---|---|
| 807 Taxes, 1938 | | $9,606.98 | |
| 228 Taxes accrued, Dec. 31, 1938 | | | $9,606.98 |
| Taxes applicable to the year 1938, paid in 1939 and charged to 1939 operations: | | | |

| Kind of tax | Year paid | Amount |
|---|---|---|
| Penna. foreign corp. franchise | 1939 | $32.06 |
| W. Va. gross sales | 1939 | 4.99 |
| W. Va. unemployment | 1939 | 5,815.34 |
| Penna. unemployment | 1939 | 908.40 |
| Federal unemployment | 1939 | 747.07 |
| W. Va. property, Wetzel Co. | 1939 | 20.86 |
| Federal capital stock | 1939 | 352.00 |
| Penna. income | 1939 | *12.86* |
| Federal old age | 1939 | 1,749.20 |
| Total | | 9,606.98 |

ENTRY NO. 236

| | | Dr. | Cr. |
|---|---|---|---|
| 527 Nonoperating revenue deductions, 1937 | | $2,313.63 | |
| Nonoperating revenue deductions, 1938 | | 2,971.77 | |
| Nonoperating revenue deductions, 1939 | | 2,741.31 | |
| 807 Operating revenue deductions, taxes, 1937 | | | $2,313.63 |
| Operating revenue deductions, taxes, 1938 | | | 2,971.77 |
| Operating revenue deductions, taxes, 1939 | | | 2,741.31 |
| Taxes not applicable to gas operations as shown by Company's Exhibit No. 37 as follows: | | | |

| Kind of tax | 1937 | 1938 | 1939 |
|---|---|---|---|
| W. Va. real and personal property | $2,304.58 | $2,960.64 | $2,733.74 |
| W. Va. gross income: | | | |
| Rents | 8.67 | 9.72 | 7.47 |
| Interest | .38 | 1.41 | .10 |
| Total | 2,313.63 | 2,971.77 | 2,741.31 |

Italic figures denote decrease.

ENTRY NO. 236—Continued

| | | Dr. | Cr. |
|---|---|---|---|
| | In addition to the above, Company's Exhibit No. 37, pages 25, 32, and 39, column 3, shows the following: | | |
| 46 | Federal income Taxes not applicable to gas operations. But since all Federal Income Taxes may be subject to adjustment for the purpose of this report after final determination of net income by the Federal Power Commission, these adjustments are not included herein: | | |
| | 1937 | $12,501.00 | |
| | 1938 | 11,757.09 | |

ENTRY NO. 237

| | | | |
|---|---|---|---|
| 538 | Miscellaneous income deductions, 1939 | $3,882.50 | |
| | Miscellaneous income deductions, 1938 | 1,937.08 | |
| | Miscellaneous income deductions, 1937 | 3,439.23 | |
| 795 | Special services, 1939 | | |
| | Special services, 1938 | | $1,937.08 |
| | Special services, 1937 | | 3,439.23 |
| 801 | Miscellaneous general expenses, 1939 | | 3,882.50 |
| | Miscellaneous general expenses, 1938 | | |
| | Miscellaneous general expenses, 1937 | | |
| | To transfer from the above Administrative and General Expense accounts, certain donations made by the Company during years 1939, 1938, and 1937, as these contributions are not considered as operating cost for rate-making purposes. | | |

Details as follows:

| Year | Reference | Description | Amount |
|---|---|---|---|
| 1937 | Sundry vo | Com. chests, Y. M. C. A., etc | $3,439.23 |
| 1938 | Sundry vo | Com. chests, Y. M. C. A., etc | 1,937.08 |
| 1939 | Sundry vo | Com. chests, Y. M. C. A., etc | 3,882.50 |
| | | | 9,258.81 |

ENTRY NO. 238

| | | | |
|---|---|---|---|
| | Nonrecurring expenses, 1939 | $59,286.67 | |
| | Nonrecurring expenses, 1938 | 46,501.33 | |
| | Nonrecurring expenses, 1937 | 34,639.47 | |
| 795 | Special services, 1939 | | |
| | Special services, 1938 | | $2,732.72 |
| | Special services, 1937 | | 3,269.35 |
| | | | 4,000.00 |
| 796 | Special legal services, 1939 | | 4,289.46 |
| | Special legal services, 1938 | | 6,883.46 |
| | Special legal services, 1937 | | |
| 869.1 | Employees' welfare expenses, 1939 | | 10,929.00 |
| | Employees' welfare expenses, 1938 | | |
| | Employees' welfare expenses, 1937 | | |
| 87 | 800.2 Pensions, 1939 | | 16,318.12 |
| | Pensions, 1938 | | |
| | Pensions, 1937 | | |
| 901 | Miscellaneous general expenses, 1939 | | 1,300.00 |
| | Miscellaneous general expenses, 1938 | | |
| | Miscellaneous general expenses, 1937 | | |
| 903 | Rents, 1939 | | 32,393.29 |
| | Rents, 1938 | | 36,348.52 |
| | Rents, 1937 | | 30,639.47 |

Italic figures denote decrease.

ENTRY NO. 238—Continued

| | | | Dr. | Cr. |
|---|---|---|---|---|
| To set out from Operating Revenue Deductions certain operating expenses of the Company that are of a nonrecurring nature. The causes for these expenditures are such that they are not likely to occur as an expense in future years. Details as follows: | | | | |
| Year | Ref. | Description | Amoun | |
| 1937 | (1) C 106 | Services of W. E. Fohl, consulting engrg. | $250.00 | |
| 1937 | (1) F 106 | do | 250.00 | |
| 1937 | (1) J 106 | do | 250.00 | |
| 1937 | (1) M 109 | do | 250.00 | |
| 1937 | (1) J 13 | Services and expenses, E. V. Williamson | 1,000.00 | |
| 1937 | (1) L 103 | Proportion of cost of World's Fair Exh | 2,000.00 | |
| 1938 | (1) C 106 | Services of W. E. Fohl, consulting engrg. | 250.00 | |
| 1938 | (1) F 105 | do | 250.00 | |
| 1938 | (1) J 106 | do | 250.00 | |
| 1938 | (1) M 107 | do | 250.00 | |
| 1938 | (1) C 106 | Services and expenses E. V. Williamson | 91.00 | |
| 1938 | (1) F 102 | do | 600.00 | |
| 1938 | (1) G 108 | do | 208.40 | |
| 1938 | (1) K 106 | Expenses only | 32.80 | |
| 1938 | (1) M 107 | Services and expenses | 312.90 | |
| 1938 | (1) M 295 | do | 1,000.00 | |
| 1938 | (1) K 103 | Traveling expense | 24.25 | |
| 1939 | (1) C 106 | Services of W. E. Fohl, consulting engrg | 250.00 | |
| 1939 | (1) F 106 | do | 250.00 | |
| 1939 | (1) J 105 | do | 250.65 | |
| 1939 | (1) M 105 | do | 250.00 | |
| 1939 | (1) A 106 | Services and expenses E. V. Williamson | 514.35 | |
| 1939 | (1) K 117 | do | 900.00 | |
| 1939 | (1) K 106 | do | 285.80 | |
| 1939 | (1) L 105 | do | 70.10 | |
| 1939 | (1) L 194 | Expenses only, E. V. Williamson | 1.82 | |
| 1938 | (2) F 85 | Legal services S. A. Weiss, Penna. taxes | 2,500.00 | |
| 1938 | (2) M 222 | Legal services Tolles, Gogsett & Ginn, adjust | 4,383.46 | |
| 48 | | | | |
| 1939 | (2) A 230 | Legal services, Tolles, Gogsett & Ginn, reversed | 4,383.46 | |
| 1939 | (3) K 43 | Settlement to Mrs. O. S. Ankrum | 10,926.00 | |
| 1939 | (4) M 229 | Payment to Equitable Life S. of U. S., additional reserve | 16,318.12 | |
| 1937 | (6) | Sun. vou., rent of Pittsburgh office paid Peoples N. G. Co | 30,639.47 | |
| 1938 | (6) | Sun. vou., rent of Pittsburgh office paid Peoples N. G. Co | 36,348.52 | |
| 1939 | (6) | Sun vou., rent of Pittsburgh office paid Peoples N. G. Co | 32,393.29 | |
| 1939 | (5) E 85 | Proportion of cost of World's Fair Exh | 800.00 | |
| 1939 | (5) H 230 | Proportion of cost of World's Fair Exh | 500.00 | |
| | | | 140,427.47 | |

(1) Account 795, Special Services.
(2) Account 796, Special Legal Services.
(3) Account 800.1, Employees' Welfare Expenses.
(4) Account 800.2, Pensions.
(5) Account 801, Miscellaneous General Expenses.
(6) Account 803, Rents.

Italic figures denote decrease.

ENTRY NO. 239

| | | Dr. | Cr. |
|---|---|---|---|
| | Nonrecurring taxes, 1937 | $10,646.09 | |
| | Nonrecurring taxes, 1938 | 4,619.10 | |
| | Nonrecurring taxes, 1939 | 9,970.23 | |
| 87 | Taxes, 1937 | | $10,646.09 |
| | Taxes, 1938 | | 4,619.10 |
| | Taxes, 1939 | | 9,970.23 |
| | To set out from operating revenue deductions the amount of Pennsylvania State taxes that will not be assessed in future years by virtue of the removal of the Company offices from that State. | | |
| | Penna. State income tax: | | |
| | 1937 $4,577.54 | | |
| | 1938 87.04 | | |
| | 1939 3,986.52 | | |
| | Penna. foreign corp. franchise tax: | | |
| | 1937 $6,068.55 | | |
| | 1938 4,532.06 | | |
| | 1939 5,983.71 | | |

49

ENTRY NO. 240

| | | Dr. | Cr. |
|---|---|---|---|
| | Distribution expenses, 1939 | $17,236.69 | |
| | Distribution expenses, 1938 | 15,428.28 | |
| | Distribution expenses, 1937 | 15,033.76 | |
| 702.2 | Expenses of general office employees, 1939 | | $5,665.40 |
| | Expenses of general office employees, 1938 | | 3,636.38 |
| | Expenses of general office employees, 1937 | | 2,395.13 |
| 708 | Special services, 1939 | | |
| | Special services, 1938 | | 1,206.60 |
| | Special services, 1937 | | 1,454.46 |
| 805 | Franchise requirements, 1939 | | 11,571.29 |
| | Franchise requirements, 1938 | | 10,565.30 |
| | Franchise requirements, 1937 | | 11,184.17 |
| | To segregate for the purpose of this report certain Administrative and General Expenses that are exclusively devoted to the distribution and sale of natural gas in the State of West Virginia. The above amounts appearing as franchise requirements have been treated as such in Company's Exhibit No. 37, pages 24, 31, and 38, column 7. | | |

ENTRY NO. 240—Continued

| | Dr. | Cr. |
|---|---|---|

Details as follows:

| Year | Ref. | Description | Amount |
|---|---|---|---|
| 1937 | (1) C 230 | Standard Oil Co. of N. J. audit, W. Va. only | $2,395.13 |
| 1938 | (1) D 33 | do | 3,656.38 |
| 1939 | (1) D 229 | do | 3,116.60 |
| 1939 | (1) M 229 | do | 2,548.80 |
| 1937 | (2) | Sun. Vou. Operating, city plant cars, W. Va | 1,454.46 |
| 1938 | (2) | do | 1,206.60 |
| 1937 | (3) F 97 | Gross earnings tax, Parkersburg, W. Va | 7,582.99 |
| 1937 | (3) M 216 | do | 3,601.18 |
| 1938 | (3) F 34 | do | 7,376.61 |
| 1938 | (3) M | do | 3,188.69 |
| 1939 | (3) G 17 | do | 8,059.57 |
| 1939 | (3) L 102 | Premium on bond furnished, Parkersburg, W. Va | 125.00 |
| 1939 | (3) M 156 | Gross earnings tax, Parkersburg, W. Va | 3,386.72 |
| | | | 47,698.73 |

(1) Account 792.2, Expenses of General Office Employees.
(2) Account 795, Special Services.
(3) Account 805, Franchise Requirements.

50 ENTRY NO. 241

| | | |
|---|---|---|
| Distribution expenses, taxes, 1937 | $149,531.72 | |
| Distribution expenses, taxes, 1938 | 123,938.27 | |
| Distribution expenses, taxes, 1939 | 133,975.32 | |
| Operating revenue deductions: | | |
| 507 Taxes, 1937 | | $149,531 |
| Taxes, 1938 | | 123,938 |
| Taxes, 1939 | | 133,975 |

To segregate taxes specifically applicable to distribution sales in West Virginia for purpose of this report. The following taxes are removed from the general account 507 and included as a direct cost of distribution sales:

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| West Virginia gross sales tax: | | | |
| Sales of tangible material, retail | $580.06 | $540.75 | $504.68 |
| Unregulated gas sales | 493.46 | 342.72 | 178.42 |
| Regulated gas sales | 132,435.13 | 106,169.04 | 117,732.55 |
| Rents | 25.04 | 34.45 | 29.26 |
| Subtotal | 133,553.69 | 107,086.96 | 118,444.91 |

ENTRY NO. 241—Continued

| | 1937 | 1938 | 1939 | Dr. | Cr. |
|---|---|---|---|---|---|
| Mercantile tax: | | | | | |
| Various cities | $19.00 | $19.00 | $19.00 | | |
| Store license, Clarksburg | 50.50 | | | | |
| Subtotal | 69.50 | 19.00 | 19.00 | | |
| City license tax: | | | | | |
| Parkersburg | 10.50 | 10.50 | 10.50 | | |
| Weston | 13.00 | 13.00 | 13.00 | | |
| Clarksburg | | 10.50 | 10.50 | | |
| Subtotal | 23.50 | 34.00 | 34.00 | | |
| City gross income and sales tax | | | | | |
| Weston | 342.94 | 1,064.18 | 929.61 | | |
| Mannington | | 90.00 | 372.50 | | |
| Subtotal | 342.94 | 1,154.18 | 1,302.11 | | |
| City Fire Protection, Sistersville | (a) 3.14 | 13.17 | (a) 13.76 | | |
| West Virginia Public Service Commission fee (based on gross intrastate sales of gas) | (a) 15,556.95 | (a) 15,630.96 | (a) 14,161.54 | | |
| Total | 149,531.72 | 123,938.27 | 133,975.32 | | |

This entry is included in Company's Exhibit 37, pages 25, 32, and 39, column 7 with the exception of items indicated (a).

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ENTRY NO. 242

| | | | |
|---|---|---|---|
| 538 Miscellaneous income deductions, 1938 | | $6,611.56 | |
| 504 Amort. of other lim.-term gas invest., 1938 | | | $6,611.56 |
| To remove from the provisions for depreciation and depletion, patent rights, and licenses as recorded on the books of the Company at Dec. 31, 1938. This amount covered an accumulation of expenditures for patents on gasoline, butane, and propane processes. The amount was charged off through the instigation of Price, Waterhouse & Co., details and authority contained in Company Voucher M96 (1938), for the reason that the term of such rights and licenses expired in prior years. | | | |

ENTRY NO. 243

| | | |
|---|---|---|
| Distribution expenses, depreciation, 1939 | $82,000.00 | |
| Distribution expenses, depreciation, 1938 | 82,267.50 | |
| Distribution expenses, depreciation, 1937 | 80,555.84 | |
| 303.1 Depreciation, 1939 | | 82,000.00 |
| Depreciation, 1938 | | 82,267.50 |
| Depreciation, 1937 | | 80,555.84 |
| To segregate for the purpose of this report the depreciation that applies to the distribution operating property of the Company. | | |

ENTRY NO. 244

| | | Dr. | Cr. |
|---|---|---|---|
| 745 | Gas-well royalties, 1938 | $78, 937. 04 | |
| | Gas-well royalties, 1937 | 81, 166. 45 | |
| 510 | Delay rentals, 1938 | | $78, 937. 04 |
| | Delay rentals, 1937 | | 81, 166. 45 |

To transfer payments made in lieu of drilling leaseholds. Prior to the adoption of the 1939 system of accounts prescribed by the State of West Virginia, these payments were included in Account 762, Rental on Unoperated Leases. In reclassifying the years 1937 and 1938, the above amounts are eliminated from this account and added to Account 761, Gas-well royalties, thereby giving the comparable effect to the 1939 Classification of Accounts. These entries are identical with those appearing in Company's Exhibit No. 37, pages 22 and 29, column 5, and are discussed in detail in the Exploration and Development Cost Exhibit.

Details as follows:

| Year | Rel. | Description | Amount |
|---|---|---|---|
| 1937 | Sun. Vou | Total charges for the year | $81, 166. 45 |
| 1938 | do | do | 78, 937. 04 |
| | | | 160, 103. 49 |

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ENTRY NO. 245

| | | Dr. | Cr. |
|---|---|---|---|
| 250.1 | Reserve for depreciation of gas plant, 1939 | $1, 136, 400. 00 | |
| | Reserve for depreciation of gas plant, 1938 | 1, 450, 537. 28 | |
| | Reserve for depreciation of gas plant, 1937 | 1, 836, 146. 94 | |
| 503.1 | Depreciation, 1939 | | $1, 118, 000. 00 |
| | Depreciation, 1938 | | 1, 279, 136. 36 |
| | Depreciation, 1937 | | 1, 736, 998. 33 |
| 503.2 | Amort. & depl. of P. N. G. L. & L. R., 1939 | | 18, 400. 00 |
| | Amort. & depl. of P. N. G. L. & L. R., 1938 | | 30, 722. 15 |
| | Amort. & depl. of P. N. G. L. & L. R., 1937 | | 58, 465. 39 |
| 512 | Abandoned leases, 1939 | | |
| | Abandoned leases, 1938 | | 40, 678. 77 |
| | Abandoned leases, 1937 | | 40, 683. 22 |

This adjustment is to reverse the provisions for depreciation and depletion, as recorded on the books of the company, from the above reserve account during the years 1937, 1938, and 1939, preparatory to setting up the annual depreciation and depletion expense computed by the examiners. Entries No. 245 to 248, inclusive, and Entry No. 250 are from the depreciation and depletion study.

ENTRY NO. 245—Continued

| Details of adj. provisions | 1937 | 1938 | 1939 |
|---|---|---|---|
| Production system: | | | |
| Operated acreage | $58,465.39 | $30,722.15 | $18,400.00 |
| Unoperated acreage | 40,683.22 | 40,678.77 | |
| Gas-well equipment | 166,565.24 | 86,716.27 | |
| Gas-well construction | 132,741.57 | 74,045.35 | |
| Other field investment | 460,573.12 | 342,977.93 | |
| Leases and easements | 21,008.85 | 15,828.17 | |
| Total production system | 880,037.09 | 590,968.64 | 18,400.00 |
| Transmission system: | | | |
| Equipment | 844,990.69 | 731,771.43 | |
| Leases and easements | 18,825.52 | 16,458.98 | |
| Total transmission system | 863,816.21 | 748,230.41 | |
| General property: | | | |
| Structures | 7,651.68 | 7,742.55 | |
| Office equipment | 11,641.96 | 11,875.60 | |
| Other general | | 9,020.02 | |
| Telephone and telegraph lines | | | |
| Total general | 19,293.64 | 28,638.23 | |
| | | | 1,118,000.00 |
| Lump-sum depreciation provision, miscellaneous: | | | |
| Cost of abandoning | 73,000.00 | 82,700.00 | |
| Total provisions adj | 1,836,146.94 | 1,450,537.28 | 1,136,400.00 |
| 53 Provisions not adjusted: | | | |
| Autos and trucks | 26,191.45 | 21,873.94 | (1) |
| Teaming | | 3,177.63 | (1) |
| Drilling and cleaning equipment | | | |
| Distribution system equipment | 80,038.65 | 81,737.72 | 81,500.00 |
| Distribution leases and easements | 517.19 | 529.78 | 500.00 |
| Surplus property available for sale | 6,631.20 | 6,631.20 | 6,631.20 |
| Appreciation, Clarksburg Lt. & Ht. Co | 4,740.72 | 4,740.72 | 4,740.72 |
| Contracts for gas | | 813.44 | 5,369.47 |
| Patent rights and licenses | | 6,611.56 | |
| Total provisions not adjusted | 118,119.21 | 126,115.99 | 99,741.39 |
| Total depreciation and depletion provisions | 1,954,266.15 | 1,576,653.27 | 1,235,141.39 |

[1] Clearing account.

[2] Portion of the lump-sum depreciation ($1,200,000) applied to distribution system equipment based on provision for years 1937 and 1938.

ENTRY NO. 245—Continued

| Details of adj. provisions | 1937 | 1938 | 1939 |
|---|---|---|---|
| Reconciliation with book accounts: | | | |
| Acct. 503.1 Depreciation | $1,843,745.62 | $1,486,455.43 | $1,200,000.00 |
| Acct. 503.2 Amortization and depletion of P. N. G. L. & L. R | 58,465.39 | 30,822.15 | 18,400.00 |
| Acct. 504 Amortization of other lim.-term gas inv | | 7,425.00 | 6,369.47 |
| Acct. 512 Abandoned leases | 40,683.22 | 40,676.77 | |
| Acct. 537 Miscellaneous amort | 4,740.72 | 4,740.72 | 4,740.72 |
| Acct. 538 Miscellaneous income deductions | 6,631.20 | 6,631.20 | 6,631.20 |
| | 1,954,266.15 | 1,576,653.27 | 1,236,141.39 |

| 54 ENTRY NO. 246 | Dr. | Cr. |
|---|---|---|
| 503.1 Depreciation, 1939 | $1,214,640.95 | |
| 503.1 Depreciation, 1938 | 1,237,339.78 | |
| 503.1 Depreciation, 1937 | 1,320,733.21 | |
| 503.2 Depletion of P. N. G. L. & L. R., 1939 | 36,772.47 | |
| 503.2 Depletion of P. N. G. L. & L. R., 1938 | 31,407.84 | |
| 503.2 Depletion of P. N. G. L. & L. R., 1937 | 40,703.86 | |
| 250.1 Reserve for depreciation of gas plant, 1939 | | $1,214,640.95 |
| 250.1 Reserve for depreciation of gas plant, 1938 | | 1,237,339.78 |
| 250.1 Reserve for depreciation of gas plant, 1937 | | 1,320,733.21 |
| 250.2 Reserve for depletion of producing natural-gas land and land rights, 1939 | | 36,772.47 |
| 250.2 Reserve for depletion of producing natural-gas land and land rights, 1938 | | 31,407.84 |
| 250.2 Reserve for depletion of producing natural-gas land and land rights, 1937 | | 40,703.86 |
| To set up in the comparative income statement for the years 1937, 1938, and 1939, the annual depreciation and depletion expense as computed by the F. P. C. examiners. This entry is made to conform with Journal Entry No. 7 included in the depreciation and depletion study. | | |

ENTRY NO. 246—Continued

Details of depreciation and depletion expense, as adjusted:

| | 1937 | 1938 | 1939 |
|---|---|---|---|
| Production system: | | | |
| Operated acreage | $40,703.86 | $31,407.84 | $36,772.47 |
| Field line R/W and construction cost | 131,847.14 | 98,836.35 | 103,157.93 |
| Gas-well construction | 198,255.61 | 165,101.37 | 182,755.43 |
| Cost of abandoning gas wells | 75,833.49 | 56,169.61 | 69,813.58 |
| Structures | 8,763.59 | 8,859.54 | 8,843.75 |
| Field-line material, measuring, and regulating station equipment | 179,949.69 | 180,626.84 | 175,624.42 |
| Gas-well equipment | 200,022.30 | 198,519.75 | 188,482.85 |
| Subtotal | 835,375.68 | 739,521.30 | 765,420.43 |
| Transmission system: | | | |
| Main line R/W and construction cost | 86,539.44 | 87,322.17 | |
| Structures | 45,000.02 | 44,921.20 | 36,447.33 |
| Mains material and measuring, and regulating station equipment | 146,777.37 | 146,989.64 | 227,711.47 |
| Compressor station equipment | 208,343.20 | 209,167.37 | 196,108.42 |
| Subtotal | 486,660.03 | 488,400.38 | 460,267.22 |
| General plant: | | | |
| Structures and improvements | 5,534.67 | 5,616.61 | 4,822.72 |
| Office furniture and equipment | 9,361.00 | 9,522.86 | 7,304.04 |
| Other equipment | 15,055.40 | 16,141.99 | 4,052.74 |
| Telephone and telegraph system | 9,488.29 | 9,544.54 | 9,546.27 |
| Subtotal | 39,439.36 | 40,825.94 | 25,725.77 |
| Total productions, transmission, and general | 1,361,457.07 | 1,268,747.62 | 1,251,413.42 |
| Depreciation expense not adjusted: | | | |
| Drilling and cleaning equipment | | | (1) |
| Autos and trucks | 26,191.45 | 21,873.94 | (1) |
| Teaming | | 3,177.95 | (1) |
| Contracts for gas | | 813.44 | 6,369.47 |
| Total | 26,191.45 | 25,865.01 | 6,369.47 |
| Total depreciation and depletion | 1,387,648.52 | 1,294,612.63 | 1,257,782.89 |

[1] Clearing account

ENTRY NO. 247

| | | Dr. | Cr. |
|---|---|---|---|
| | Production expenses, cost of abandoning, 1938 | $82,166.93 | |
| | Production expenses, cost of abandoning, 1937 | 72,848.07 | |
| 250.1 | Reserve for deprec. of gas plant as of 12/31/38 | | $82,166.93 |
| 250.1 | Reserve for deprec. of gas plant as of 12/31/37 | | 72,848.07 |
| | To transfer from the above reserve account the actual cost of abandoning gas wells, field lines and other property during the years 1937 and 1938. | | |

ENTRY NO. 248

| | | | |
|---|---|---|---|
| 312 | Abandoned leases, 1939 | $23,067.31 | |
| 312 | Abandoned leases, 1938 | 61,828.01 | |
| 312 | Abandoned leases, 1937 | 19,824.10 | |
| 250.1 | Reserve for deprec. of gas plant as of 12/31/39 | | $23,067.31 |
| 250.1 | Reserve for deprec. of gas plant as of 12/31/38 | | 61,828.01 |
| 250.1 | Reserve for deprec. of gas plant as of 12/31/37 | | 19,824.10 |
| | To transfer from the above reserve account the recorded losses for abandoned leases during the years 1937, 1938, and 1939. | | |

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ENTRY NO. 249

| | | | |
|---|---|---|---|
| 312 | Abandoned leases, 1939 | $22,096.89 | |
| 100.4 | Gas plant held for future use as of 12/31/39 | | $22,096.89 |
| | To set up the adjustment to abandoned leases as developed in a separate study of exploration and development costs for the period 1902 to 1939, inclusive, that portion applicable to the year 1939. For details see Exploration and Development Cost Study. | | |

ENTRY NO. 250

| | | | |
|---|---|---|---|
| 250.3 | Reserve for abandoned leases as of 12/31/38 | $104,811.48 | |
| 271 | Earned surplus (see detail) | | $104,811.48 |
| | To transfer from the above reserve account the adjustment to abandoned leases (prior to Dec. 31, 1938) as developed in the Company's original cost study, for the reason that the examiner had not provided an amortization reserve for nonproductive acreage. The $104,811.48 has been allocated to the yearly charges to Account 312 in the study of Exploration and Development Costs as follows: | | |
| | Period prior to 12/31/38 $101,384.00 | | |
| | Year 1938 (Credit Acct. 312) 2,593.33 | | |
| | Year 1937 (Credit Acct. 312) 832.15 | | |
| | As above $104,811.48 | | |

[Pages 57 to 74 omitted.]

1 **EXHIBIT NO. 78.—OPERATIONS DATA FOR THE YEAR ENDED DECEMBER 31, 1940, F. P. C. WITNESS DUNN**

## WRITTEN STATEMENT

This report on 1940 operations is a continuation of other accounting exhibits to December 31, 1940. The schedules and adjustments have been prepared by the same examiners of account who prepared similar adjustments in the reports for prior years. The examiners' adjustments, all being the same nature as those included and explained in other exhibits, are, therefore, given the same identifying entry numbers.

A detailed audit was not made for the year 1940 as the adjustments developed for the preceding years served as a guide to determine which accounts required examination; thus the investigation was limited accordingly.

In all matters affecting the 1940 operations the examiners have considered the following stipulation:

**STIPULATION**

It is hereby stipulated by and between Counsel for the Hope Natural Gas Company and Counsel for the Federal Power Commission that the attached statement represents the 1940 revenues and expenses per books of the Hope Natural Gas Company, exclusive of revenues and expenses per books with respect to the merged Reserve Gas Company.

The stipulated amounts are set forth in the examiners' income statement and supporting schedules. Adjustments are applied after giving effect to the stipulated amount.

2 *Changes in Plant Accounts.*

Schedule No. 7—Summary of Utility Plant Investment as at December 31, 1940, sets forth the recorded additions during 1940 in the amount of $1,910,483.01 and the recorded retirements in the amount of $944,949.71 applicable to Gas Plant, exclusive of Distribution Plant, resulting in a net increase of $965,533.30.

*Changes in Depreciation and Depletion Reserves.*

Schedule No. 8, Depletion and Depreciation Expense for the Year Ended December 31, 1940, sets forth the annual expense



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computed by methods and rates consistent with all other years. Depreciation expense is almost the same, in amount, as the years immediately preceding, but depletion expense increased in excess of $230,000.00 over 1939. This is due to increased production in 1940.

The balance in the reserves applicable to gas plant in service, excluding distribution plant, shows an increase at December 31, 1940, as follows:

| | |
|---|---|
| Balance, Dec. 31, 1939 | $24,072,167.17 |
| Provision for 1940 | 1,480,947.16 |
| Net charge to Reserves 1940 | (869,843.37) |
| Balance, Dec. 31, 1940 | 24,683,270.96 |

3 The net increase of $611,103.79 offsets somewhat the above-mentioned net increase in plant accounts of $965,533.30.

*Gasoline Operations of Hope Construction and Refining Company.*

Schedules Nos. 9, 9a, 9b and 9c explain in detail examiners' adjusting entries Nos. 213, 214, 215, 216, and 217 which record the effect of Hope Construction and Refining Company's West Virginia gasoline and butane operations during the year 1940.

Schedule No. 9 is a condensed earnings statement of the West Virginia gasoline department, and is divided to show by accounts, the earnings per books, the examiners' adjustments thereto, and the earnings as adjusted. Schedule No. 9a is similar in form and content and presents the same information for the butane operations.

Schedule No. 9b lists the adjustments shown on these earnings statements and explains each adjustment.

Schedule No. 9c shows a condensed summary of investment in West Virginia gasoline and butane plant, the related reserve for depreciation, and the average net investment for the year 1940.

These four schedules present in condensed form for the year 1940, similar information shown in Exhibit No. 63 for
4 the years 1937, 1938, and 1939. In preparing these schedules the same procedures were followed, the same earnings statements adjusting entries were made, and the same investment in plant was used as those for prior years.

The adjusted plant balances as of January 1, 1940, shown on Schedule No. 9c, are taken from balances shown in Exhibit No. 63 for December 31, 1939. The only adjustments to the 1940 plant changes recorded on the books of account were those made

to eliminate retirements of plant or parts of plant which had been previously retired by examiners' adjusting entries in Exhibit No. 63. The working capital requirement used in these schedules is that developed in Exhibit No. 63.

Pending the Commission's consideration and determination of a fair rate of return on gasoline investment, six percent has been used in this study.

Schedule No. 9d is a condensed earnings statement of the Kennedy gasoline extraction plant. This plant was formerly owned by the Reserve Gas Company and was acquired by Hope Construction and Refining Company December 31, 1938. In order to present the factual conditions as they existed in the four-year period 1937–1940, Exhibit No. 63 and this exhibit include this plant in the investment for 1939 and 1940 and its earnings in the income statement for those years. However, the investment and depreciation schedules separate the Kennedy plant from the other West Virginia plants.

This schedule is presented to show the revenues, expenses, and net earnings of this plant, since, by stipulation between counsel, the earnings of and investment in the merged Reserve Gas Compay have been excluded from Hope Natural Gas Company earnings during the year 1940.

Schedule No. 9e, "Gasoline Sales by Plants," shows that the average price per gallon received from gasoline sales from West Virginia plants to Standard Oil Company was $0.0179, producing revenues of $64,930.90, while the average price of sales to others was $0.0316. Had the sales to Standard met the average price of sales to others, the revenue produced would have been $114,517.42, or an increase of $49,586.52. The explanation made by company officers is that gasoline is sold to Standard Oil Company at dump prices due to insufficient storage facilities of Hope Construction and Refining Company.

*Income Statement.*

Gas operating revenues and net utility income show a marked increase in 1940. This is shown in a comparison of the adjusted income statements:

| | 1937 | 1938 | 1939 | 1940 |
|---|---|---|---|---|
| Operating revenues | $19,323,830 | $16,575,856 | $17,967,666 | $22,839,601 |
| Operating expenses | 12,506,400 | 12,146,434 | 11,607,652 | 12,936,127 |
| Depreciation and depletion | 1,387,649 | 1,294,613 | 1,257,783 | 1,486,943 |
| Taxes | 1,318,110 | 1,001,688 | 1,227,674 | 2,034,284 |
| Nonrecurring expenses | 45,286 | 51,120 | 69,257 | 89,660 |
| Exploration and development costs | 501,076 | 612,242 | 500,344 | 407,926 |
| Total deductions | 15,758,520 | 15,106,097 | 14,662,709 | 16,954,933 |
| Net utility income | 3,565,310 | 1,469,759 | 3,304,957 | 5,884,668 |

Schedule No. 1 is an Income Statement for the Year 1940, showing deductions in accordance with the above-mentioned stipulation, and adjustments made thereafter. Consideration in the adjustments is given to the exclusion of income and expense items applicable to the former Reserve Gas Company.

Attention is directed to the stipulated amounts applicable to the Hope Company as shown in column (e) and As Adjusted, column (h). It will be noted that the adjusted amount of net utility income is $949,222.01 greater than the company's books as stipulated for the year 1940. This increase is accounted for by a decrease, through examiners' adjustments, in Operating Revenue, Operating Revenue Deductions, setting out Nonrecurring Expenses and an increase in Exploration and Development Costs. The accounts contained in each group are treated individually in Schedules Numbers 1, 2, and 3, and are summarized below:

| Particulars | Examiners' Adjustments Increase or (Decrease) |
|---|---|
| Operating Revenues | *$603,563.19 |
| Operating Revenue Deductions | *1,654,867.23* |
| Nonrecurring Expenses | 89,650.60 |
| Exploration and Development Costs | 12,422.43 |
| Increase in Net Utility Income | 949,222.01 |

For the purpose of further clarifying the application of examiners' adjustments as shown in Exhibit 67 as well as those shown in this exhibit, the following table is presented. This table shows the net adjustments to Net Utility Income for the years 1937 to 1940, inclusive, and the groups of accounts concurrently affected.

*Italic figures denote decrease.

| | 1937 | 1938 | 1939 | 1940 |
|---|---|---|---|---|
| Net utility income (increase) | $1,200,855.94 | $585,417.59 | $1,021,588.64 | $949,222.01 |
| Other income (debit) | 18,777.14 | 3,882.03 | 2,741.31 | 3,218.10 |
| Income deductions | 320,814.60 | 280,605.58 | 284,492.41 | 306,522.23 |
| Net income transferred to surplus [1] | 861,294.20 | 300,929.98 | 734,354.92 | 639,481.68 |
| | 1,200,885.94 | 585,417.59 | 1,021,588.64 | 949,222.01 |

[1] These amounts have a corresponding effect on the balance sheet.

The increase in Net Income Transferred to Surplus, arising from examiners' adjustments for the year 1940, amounting to $639,481.68, is summarized in Schedule No. 1-A, which shows the various balance sheet accounts affected thereby.

8 *Gas Service Revenues.*

The gas service revenues per books, company's stipulation and as adjusted are presented in Schedule No. 4. This schedule shows the number of customers at December 31, 1940, the volume on the sales contract basis and the average rate per MCF in addition to the dollar amounts of gas sales. The company's analysis of gas earnings was used as the basis for compilation of this statement.

The adjusted gas service revenues, showing the amount of sales in the State of West Virginia and those outside the State and their percentage relationship, are as follows:

| | Gas service revenues | Sales in West Virginia | Sales outside West Virginia |
|---|---|---|---|
| Amount | $22,732,430.02 | $3,435,675.16 | $19,296,754.86 |
| Percent | 100% | 15.1% | 84.9% |

The sales outside the State of West Virginia were made to the following companies as shown in Schedule No. 4:

Fayette County Gas Company.
The Manufacturers Light & Heat Company.
The East Ohio Gas Company.
The Peoples Natural Gas Company.
The River Gas Company.

The last three of these companies are associated with Hope Natural Gas Company.

9 The examiners' adjustments of gas service revenues relating to Hope Construction and Refining Company and The Peoples Natural Gas Company for 1940 are in conformity with the explanation shown on page 5 of Exhibit 67 and indicated as "All years (a) (b) (c)."

*Other Gas Revenues and Other Income.*

The accounts within these groups, shown in Schedules Nos. 1 and 2, were adjusted substantially the same as in Exhibit 67, explained on pages 6 and 7 of that exhibit as "All years (a) (b) and (c)."

*Operating Revenue Deductions.*

Schedule No. 3 is a detailed statement of operating expenses, showing adjustments made thereto for the year 1940. This schedule shows the individual accounts, grouped by functional divisions. The net effect of the adjustments by divisions is summarized as follows:

| Particulars: | Net adjustments—Dr. increase or (cr.) decrease |
|---|---|
| Production | $213,287.39 |
| Other production | *112,227.25* |
| Transmission | *676,362.44* |
| Distribution | *251,595.20* |
| Customers accounting and collection | *1,009.01* |
| Sales promotion | |
| Administrative and general | *814,117.21* |
| Total operating expenses | *$1,565,498.10* |

10 Attention is directed to Schedule No. 1 which includes under the heading of Operating Revenue Deductions accounts adjusted by the examiners as follows:

| Account: | | Net adjustments—Dr. increase or (cr.) decrease |
|---|---|---|
| 503.1 | Depreciation | $114,444.73 |
| 503.2 | Amort. & depl. of P. N. G. L. & L. R. | *38,700.14* |
| 504 | Amort. of other L. T. G. I. | |
| 507 | Taxes | *242,514.00* |
| | | *$89,369.13* |

Following examiners' adjustment No. 246 are the details supporting the revised depreciation and depletion expenses as set forth in Schedule No. 1.

Schedule No. 6 summarizes the taxes accrued or paid by the company during the year 1940. This summary shows the total

*Italic figures denote decrease.

amount of taxes paid or accrued during the year and segregates the amounts applicable to the current year and those applicable to other years in columns (b), (c), and (d). Columns (e) and (f) set out the amounts eliminated as applicable to the former Reserve Gas Company. The resulting balances applicable to Hope Natural Gas Company are comparable to years 1937, 1938, and 1939, before adjustments. Columns (g) and (i) contain the examiners' adjustments and are shown in this manner to separate the various adjusted taxes into certain categories, i. e., the
11 amount of taxes chargeable to tax expense during 1940 in the ordinary course of operations as shown in column (h) and the balance as shown in column (j) after special treatment for rate making purposes by eliminating certain specific distribution taxes, nonrecurring taxes, etc. The adjustments to reflect the latter, which are included in column (i), are as follows:

Estimated amount of State taxes applicable to property devoted to the transportation of coke oven gas.

Taxes paid and accrued on West Virginia property not applicable to gas operations.

Fee paid Public Service Commission of West Virginia.

Distribution system taxes.

Taxes not applicable to gas operations.

Nonrecurring taxes.

Miscellaneous city taxes.

The taxes have been treated in the same manner as for the years 1937, 1938, and 1939, and Schedule No. 6 in this report is a continuation of Schedule No. 8, appearing in Exhibit 67.

The amounts set out as "Nonrecurring Expenses" in Schedule No. 1 are recognized as operating expenses of the Company.
12 They include such items as rent at Pittsburgh, Pennsylvania, proportion of World's Fair Exhibit, loss on experimental liquefying gas plant, moving expenses in connection with the transfer of the company's general office from Pittsburgh, Pennsylvania, to Clarksburg, West Virginia, and Pennsylvania Foreign Franchise and Net Income taxes. For purposes of this report these expenses have been segregated into a single caption, as expenses of this nature are not expected to occur in the immediate future.

*Exploration and Development Costs.*

This group of accounts, appearing in Schedule No. 1, is the last taken into consideration before arriving at Net Utility Income.

The only adjustment made in this group is one in the amount of $12,422.43 charged to Account 512, Abandoned Leases. It is caused by the transfer from Account 250.1, Reserve for Depreciation of Gas Plant, and represents the losses for abandoned leases during the year 1940.

*Other Income.*

This subdivision, appearing in Schedule No. 1, contains an adjustment for taxes not applicable to natural gas operations. This is the only adjustment in this group of accounts.

13 *Income Deductions.*

The adjustments in this group of accounts are all reflected in Account 538, Miscellaneous Income Deductions. They represent the concurrent debit and credit amounts of adjustments to income and expense accounts that affect the Net Utility Income, but which have no effect on the net income transferred to surplus. Details of these adjustments are shown in Schedule No. 7.

EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

Washington, D. C., *May 20, 1942.*

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*

CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

Schedule No. 1

## HOPE NATURAL GAS COMPANY

*Income statement showing adjustments for the year 1940*

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | *I—Utility income* | | | | | | |
| | Gas Operating Income: | | | | | | |
| 501 | Operating revenues | $24,688,576.30 | $1,245,412.14 | $23,443,164.16 | $616,003.55 | $12,440.36 | $22,839,600.97 |
| | Operating revenue deductions: | | | | | | |
| 502 | Operating expenses | 14,989,759.77 | 488,134.84 | 14,501,624.93 | 885,630.15 | 2,451,128.25 | 12,936,126.83 |
| 503.1 | Depreciation | 1,438,385.94 | 128,967.51 | 1,309,418.43 | 114,444.73 | | 1,423,863.16 |
| 503.2 | Amortization and depletion of P. N. G. L. & L. R. | 25,200.00 | 6,816.14 | 18,383.86 | 38,700.14 | | 57,084.00 |
| 504 | Amortization of other limited term G. I. | 5,996.02 | | 5,996.02 | | | 5,996.02 |
| 507 | Taxes | 2,464,514.26 | 187,716.56 | 2,276,797.70 | | 242,514.00 | 2,034,283.70 |
| | Total operating revenue deductions | 18,923,855.99 | 811,635.05 | 18,112,220.94 | 1,038,775.02 | 2,693,642.25 | 16,457,353.71 |
| | Net operating revenues | 5,764,720.31 | 433,777.09 | 5,330,943.22 | 1,654,778.57 | 2,706,082.61 | 6,382,247.26 |
| | Nonrecurring expenses | | | | 89,659.60 | | 89,659.60 |
| | Utility income | 5,764,720.31 | 433,777.09 | 5,330,943.22 | 1,744,438.17 | 2,706,082.61 | 6,292,587.66 |
| | *II—Exploration and development costs* | | | | | | |
| 510 | Delay rentals | 395,030.45 | 31,735.24 | 363,295.21 | | | 363,295.21 |
| 511 | Nonproductive well drilling | 32,152.42 | | 32,152.42 | | | 32,152.42 |
| 512 | Abandoned leases | 50.00 | | 50.00 | 12,422.43 | | 12,472.43 |
| | Total exploration and development costs | 427,232.87 | 31,735.24 | 395,497.63 | 12,422.43 | | 407,920.06 |
| | Net utility income | 5,337,487.44 | 402,041.85 | 4,935,445.59 | 1,756,860.60 | 2,706,082.61 | 5,884,667.60 |

295

*Income statement showing adjustments for the year 1940*—Continued

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | *III—Other income* | | | | | | |
| 520 | Income from miscellaneous job. and cont. work | $1,137.75 | | $1,137.75 | | | $1,137.75 |
| 521 | Income from nonutility operations | .79 | | .79 | | | .79 |
| 522 | Revenues from lease of other physical property | 1,552.00 | | 1,552.00 | | | 1,552.00 |
| 523 | Dividend revenues | 72.00 | | 72.00 | | | 72.00 |
| 524 | Interest revenues | 313,580.82 | $20,875.00 | 292,705.82 | | | 292,705.82 |
| 526 | Miscellaneous nonoperating revenues | 1,102.47 | 211.50 | 890.97 | | | 890.97 |
| 527 | Nonoperating revenue deductions | *16.59* | | *16.59* | $3,218.10 | | *3,234.69* |
| | Total other income | 217,427.66 | 21,086.50 | 296,341.16 | 3,218.10 | | 293,123.06 |
| | Gross income | 5,654,915.10 | 423,128.35 | 5,231,786.75 | 1,760,078.70 | $2,706,082.61 | 6,177,790.66 |
| | *IV—Income deductions* | | | | | | |
| 535 | Other interest charges | 6,159.73 | 383.84 | 5,775.89 | | | 5,775.89 |
| 536 | Interest charged to construction—cr | *19,677.40* | *79.37* | *19,598.03* | | | *19,598.03* |
| 537 | Miscellaneous amortization | 4,740.72 | | 4,740.72 | | | 4,740.72 |
| 538 | Miscellaneous income deductions | 6,693.06 | | 6,693.06 | 306,522.23 | | 313,215.29 |
| | Total income deductions | 2,085.89 | 304.47 | 2,388.36 | 306,522.23 | | 304,133.87 |
| | Net income transferred to surplus | 5,656,998.99 | 422,823.88 | 5,234,175.11 | 2,066,600.93 | 2,706,082.61 | 5,872,656.79 |

Italic figures denote decrease.

15 Docket G-113 Schedule No. 1-A

## HOPE NATURAL GAS COMPANY

### *Summary of Examiners' Adjusting Entries for the Year 1940*

| Account No. | Income accounts | Schedule reference | 1940 |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| 600-608 | Gas service revenues | 2 | $371,802.80 |
| 610-619 | Other gas revenues | 2 | 231,790.39 |
| 733-749 | Natural gas production | 3 | *213,287.39* |
| 754-757 | Other production expenses | 3 | *112,227.25* |
| 758-764 | Transmission expenses | 3 | *676,962.44* |
| 765-777 | Distribution expenses | 3 | 251,305.20 |
| 778-784 | Customers' accounting and collecting expenses | 3 | *1,709.01* |
| 790-809 | Administrative and general expenses | 3 | *814,117.21* |
| 503-506 | Depreciation and depletion | 1 | 153,144.87 |
| 507 | Taxes | 1 | *242,514.00* |
| 510-513 | Exploration and development costs | 1 | 12,422.43 |
| | Nonrecurring expenses | 1 | 89,659.60 |
| 520-527 | Other income | 1 | 3,218.10 |
| 530-538 | Income deductions | 1 | 306,522.23 |
| | Net adjustments to income accounts | | *639,481.68* |
| | *Balance sheet accounts* | | |
| 126.2 | Receivables from associated companies | | 237,726.76 |
| 143.4 | Other work in progress—Stores expense | | *640.43* |
| 146 | Other deferred debits | | 624,041.30 |
| 228 | Taxes accrued | | 16,167.47 |
| 250.1 | Reserve for depreciation of gas plant | | *197,828.40* |
| 250.2 | Reserve for depletion of P. N. G. L. & L. R. | | *87,084.00* |
| 271 | Surplus as of Jan. 1, 1940 | | 17,098.98 |
| | | | 639,481.68 |

Italic figures denote deficit.

## HOPE NATURAL GAS COMPANY

*Operating Revenues Showing Adjustments for the Year 1940*

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | *Gas service revenues* | | | | | | |
| 600 | Residential sales | $1,758,415.77 | $19,661.54 | $1,738,754.23 | | | $1,738,754.23 |
| 602.1 | Commercial sales | 286,733.56 | 657.81 | 286,075.75 | | | 286,075.75 |
| 602.2 | Industrial sales | 1,352,823.48 | 27.27 | 1,352,796.21 | | | 1,352,796.21 |
| 603 | Public street and highway lighting | 225.20 | | 225.20 | | | 225.20 |
| 604 | Other sales to public authorities | 209.69 | | 209.69 | | | 209.69 |
| 605.1 | Sales to affiliated utilities | 18,613,252.47 | 1,088.15 | 18,612,164.32 | $292,158.36 | | 18,320,005.96 |
| 605.2 | Sales to nonaffiliated utilities | 2,197,567.89 | 1,209,885.00 | 987,682.89 | | | 987,682.89 |
| 608 | Other sales | 129,142.53 | 2,818.00 | 126,324.53 | 79,644.44 | | 46,680.09 |
| | Total gas service revenues | 24,338,370.59 | 1,234,137.77 | 23,104,232.82 | 371,802.80 | | 22,732,430.02 |
| | *Other gas revenues* | | | | | | |
| 610 | Rent from gas property | 26,308.10 | 2,914.56 | 23,393.54 | | $12,440.36 | 35,833.90 |
| 612 | Customers' forfeited discount and penalties | 24,083.48 | 296.74 | 23,786.74 | | | 23,786.74 |
| 617.1 | Revenue from processing natural gas—Cont. gas | 62,435.67 | 7,801.51 | 54,634.16 | 54,634.16 | | |
| 617.2 | Revenue from processing natural gas—Butane gas | 25,957.50 | | 25,957.50 | 25,957.50 | | |
| 618 | Revenue from incidental oil sales | 8,431.47 | 150.99 | 8,280.48 | | | 8,280.48 |
| 619.1 | Warehouse sales | 283.46 | | 283.46 | | | 283.46 |
| 619.2 | Unclaimed security deposits | 41.17 | | 41.17 | | | 41.17 |
| 619.3 | Management fees and expenses | 122,274.81 | | 122,274.81 | 122,274.81 | | |
| 619.4 | Unclaimed checks | 701.34 | 110.57 | 590.77 | | | 590.77 |
| 619.5 | Shop labor—field | 189.55 | | 189.55 | | | 189.55 |
| 619.6 | Gas sales contract adjustments | 41,334.28 | | 41,334.28 | 41,334.28 | | |
| 619.9 | Other miscellaneous gas revenues | 38,164.88 | | 38,164.88 | | | 38,164.88 |
| | Total other gas revenues | 350,205.71 | 11,274.37 | 338,931.34 | 244,200.75 | 12,440.36 | 107,170.95 |
| | Total operating revenues | 24,688,576.30 | 1,245,412.14 | 23,443,164.16 | 616,003.55 | 12,440.36 | 22,839,600.97 |

HOPE NATURAL GAS COMPANY

*Operating expenses showing adjustments for the year 1940*

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | Natural gas production | | | | | | |
| | Operation: | | | | | | |
| 733 | Operation supervision and engineering | $111,013.94 | $7,603.81 | $103,410.13 | | $8,815.71 | $94,594.42 |
| 734.1 | Gas well operating labor | 406,415.95 | 59,268.74 | 347,147.21 | | | 347,147.21 |
| 734.2 | Field line operating labor | 133,471.46 | 15,848.70 | 117,622.76 | | 525.54 | 117,097.22 |
| 734.3 | Field measuring and regulating station labor | 22,125.83 | 107.51 | 22,018.32 | | 1,769.45 | 20,248.87 |
| 734.4 | Other production labor | 80,722.18 | 6,877.73 | 73,844.45 | | 3,010.11 | 70,834.34 |
| 735.1 | Gas well supplies and expenses | 196,820.85 | 32,158.84 | 164,662.01 | | | 164,662.01 |
| 735.2 | Field line supplies and expenses | 13,887.28 | 1,153.26 | 12,734.02 | | 56.90 | 12,677.12 |
| 735.3 | Field measuring and regulating station supplies and expenses | 3,653.85 | 98.02 | 3,555.83 | | 194.54 | 3,361.29 |
| 735.4 | Other production supplies and expenses | 18,185.88 | 3,194.82 | 14,991.06 | | | 14,991.06 |
| 736 | Purification supplies and expenses | | | | | | |
| 737 | Production maps and records | 3,035.77 | 80.65 | 2,955.12 | | | 2,955.12 |
| 738 | Miscellaneous production expenses | 5,078.61 | | 5,078.61 | | | 5,078.61 |
| | Total production operation | 994,411.60 | 126,392.08 | 868,019.52 | | 14,372.25 | 853,647.27 |
| | Maintenance: | | | | | | |
| 739 | Maintenance supervision and engineering | 19,206.31 | 2,063.29 | 17,143.02 | | | 17,143.02 |
| 740.1 | Maintenance of gas well structures | | | | | | |
| 740.2 | Maintenance of field measuring and regulating station structure | 297.74 | | 297.74 | | | 297.74 |
| 740.3 | Maintenance of other production system structures | 5,494.89 | 330.62 | 5,164.27 | | | 5,164.27 |
| 741 | Maintenance of producing gas wells | 93,000.00 | 9,568.94 | 83,431.06 | | 189.04 | 83,242.02 |

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*Operating expenses showing adjustments for the year 1940*—Continued

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | **Natural gas production—Continued.** | | | | | | |
| | Maintenance—Continued | | | | | | |
| 742.1 | Maintenance of field lines | $158,651.31 | $11,385.79 | $147,265.52 | | | $147,265.52 |
| 742.2 | Maintenance of field measuring and regulating station equipment | 1,677.45 | 86.17 | 1,591.28 | | | 1,591.28 |
| 743 | Maintenance of drilling and cleaning equipment | | | | | | |
| 744 | Maintenance of other natural gas property | 1,014.37 | 348.14 | 666.23 | | | 666.23 |
| | Total production maintenance | 279,342.07 | 23,782.95 | 255,559.12 | | $189.04 | 255,370.08 |
| | Miscellaneous: | | | | | | |
| 745 | Gas well royalties | 1,001,411.75 | 115,570.48 | 885,841.27 | | | 885,841.27 |
| 746 | Natural gas rents | 750.50 | | 750.50 | | | 750.50 |
| 747.1 | Residuals produced—Credit | | | | | 832,851.05 | *832,851.05* |
| 747.2 | Residuals operating expenses | | | | $634,124.95 | | 634,124.95 |
| 747.3 | Residuals maintenance expenses | | | | | | |
| 748.1 | Joint expenses—Debit | | | | | | |
| 748.2 | Joint expenses—Credit | | | | | | |
| 749 | Duplicate production charges—Credit | *624,053.81* | *41,477.43* | *582,576.38* | | | *582,576.38* |
| | Total miscellaneous | 378,108.44 | 74,093.05 | 304,015.39 | 634,124.95 | 832,851.05 | 105,289.29 |
| | Total natural gas production | 1,651,862.11 | 224,268.08 | 1,427,594.03 | 634,124.95 | 847,412.34 | 1,214,306.04 |

| 18 | Other production expenses | | | | | | |
|---|---|---|---|---|---|---|---|
| | Miscellaneous: | | | | | | |
| 754.11 | Natural gas purchased from affiliated companies | 208,184.47 | 6,008.44 | 202,176.03 | | 107,032.95 | 95,143.08 |
| 754.12 | Natural gas purchased from others | 8,292,681.04 | 16,625.37 | 8,276,055.67 | | | 8,276,055.67 |
| 754.121 | Gas purchased contract adjustment | 2,954.85 | | 2,954.85 | | | 2,954.85 |
| 754.21 | Other gas purchased from affiliated companies | | | | | | |
| 754.22 | Other gas purchased from others | | | | | | |
| | Total gas purchased—natural gas | 8,503,820.36 | 22,633.81 | 8,481,186.55 | | 107,032.95 | 8,374,153.60 |
| 755.1 | Purchased gas operating labor | 94,647.55 | 67.50 | 94,580.05 | | 5,194.30 | 89,385.75 |
| 755.2 | Purchased gas supplies and expenses | 24,720.02 | 769.32 | 23,950.70 | | | 23,950.70 |
| 755.3 | Maintenance of purchased gas measuring station structure | 279.06 | | 279.06 | | | 279.06 |
| 755.4 | Maintenance of purchased gas measuring station equipment | 6,004.03 | 29.77 | 5,974.26 | | | 5,974.26 |
| 755.5 | Purchased gas rent | 10.00 | | 10.00 | | | 10.00 |
| 756 | Other expenses | | | | | | |
| 757.1 | Joint expenses—debit | | | | | | |
| 757.2 | Joint expenses—credit | | | | | | |
| | Total purchased gas expenses | 125,660.66 | 866.59 | 124,794.07 | | 5,194.30 | 119,599.77 |
| | Production expenses—cost of abandoning | | | | | | |
| | Total other production expenses | 8,629,481.02 | 23,500.40 | 8,605,980.62 | | 112,227.25 | 8,493,753.37 |

Italic figures denote decrease.

*Operating expenses showing adjustments for the year 1940*—Continued

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | Transmission expenses | | | | | | |
| | Operation: | | | | | | |
| 758 | Operation supervision and engineering | $16,405.97 | $186.96 | $16,219.01 | | | $16,219.01 |
| 759.111 | Pumping station labor | 571,781.37 | 43,376.53 | 528,404.84 | | $19,142.21 | 509,262.63 |
| 759.112 | Measuring and regulating station labor | 29,039.90 | 6,600.12 | 22,439.78 | | | 22,439.78 |
| 759.1211 | Pumping station supplies and expenses | 423,874.03 | 8,829.70 | 415,044.33 | | 295,764.14 | 119,280.19 |
| 759.1212 | Pumping station fuel | 942,051.46 | 40,986.32 | 901,065.14 | | 342,219.23 | 558,845.91 |
| 759.122 | Measuring and regulating station supplies and expenses | 3,789.15 | 997.13 | 2,792.02 | | | 2,792.02 |
| 759.21 | Operation of transmission mains—labor | 95,784.56 | 1,759.17 | 94,025.39 | | 1,944.63 | 92,080.76 |
| 759.22 | Operation of transmission mains—supplies and expenses | 10,929.78 | 6,622.68 | 4,307.10 | | 89.08 | 4,218.02 |
| 759.23 | Transportation and compensation charges paid others | 57,493.75 | 124.58 | 57,369.17 | | | 57,369.17 |
| 759.24 | Other transmission system expense | 23,272.38 | 3,766.19 | 19,506.19 | | 1,351.30 | 18,154.89 |
| 759.3 | Transmission maps and records | 544.05 | 127.20 | 416.85 | | | 416.85 |
| | Total transmission operations | 2,174,966.40 | 113,876.58 | 2,061,589.82 | | 660,510.59 | 1,401,079.23 |
| | Maintenance: | | | | | | |
| 760 | Maintenance supervision and engineering | 6,174.98 | 48.70 | 6,126.28 | | | 6,126.28 |
| 761.1 | Maintenance of pumping station structures | 99,103.22 | 11,659.83 | 87,443.39 | | 4,767.24 | 82,676.15 |
| 761.2 | Maintenance of measuring and regulating station structure | 1,993.27 | | 1,993.27 | | | 1,993.27 |
| 761.3 | Maintenance of other transmission system structure | 724.11 | 156.78 | 567.33 | | | 567.33 |
| 762.1 | Maintenance of mains | 58,838.67 | 5,439.57 | 53,399.10 | | 1,104.40 | 52,294.70 |
| 762.21 | Maintenance of pumping station equipment | 246,021.86 | 27,468.82 | 218,553.04 | | 3,344.12 | 215,208.92 |
| 762.22 | Maintenance of measuring regulating station equipment | 3,511.32 | 120.98 | 3,390.34 | | | 3,390.34 |
| 762.23 | Maintenance of other transmission system equipment | 7,029.39 | 36.36 | 6,993.03 | | | 6,993.03 |
| | Total transmission maintenance | 423,396.32 | 44,931.04 | 378,465.78 | | 9,215.76 | 369,250.02 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | *Miscellaneous:* | | | | | | |
| 763 | Rents | | | | | | |
| 764.1 | Joint expenses—Debit | 1,946.80 | 300.01 | 1,646.79 | | | 1,646.79 |
| 764.2 | Joint expenses—Credit | *4,521.24* | | *4,521.24* | | | |
| | Total miscellaneous | *2,574.44* | *300.01* | *2,874.45* | | 6,636.09 | *10,957.83* |
| | Total transmission expenses | 2,595,988.78 | 158,607.63 | 2,437,381.15 | | 676,362.44 | 1,761,018.71 |
| | ***Distribution expenses*** | | | | | | |
| | Operation: | | | | | | |
| 765 | Operation supervision and engineering | 8,449.98 | 155.91 | 8,294.07 | | | 8,294.07 |
| 766.1 | Distribution maps and records | 4,216.15 | | 4,216.15 | | | 4,216.15 |
| 766.2 | Other distribution office expenses | 3,045.44 | 27.41 | 3,018.03 | | | 3,018.03 |
| 767 | Operation of distribution lines | 51,537.17 | 623.93 | 50,913.24 | | | 50,913.24 |
| 768.1 | Removing and resetting meters | 30,806.51 | 691.82 | 30,114.69 | | | 30,114.69 |
| 768.2 | Miscellaneous meter expenses | 4,388.49 | 152.80 | 4,235.69 | | | 4,235.69 |
| 769 | Services on consumers' premises | 12,115.13 | 125.50 | 11,989.63 | | | 11,989.63 |
| 770 | Operation of street lighting equipment | 1.25 | | 1.25 | | | 1.25 |
| | Total distribution operation | 114,560.12 | 1,777.37 | 112,782.75 | | | 112,782.75 |
| | Maintenance: | | | | | | |
| 771 | Maintenance supervision and engineering | 6,824.79 | 105.20 | 6,719.59 | | | 6,719.59 |
| 772 | Maintenance of structures and improvements | 3,569.80 | .28 | 3,569.52 | | | 3,569.52 |
| 773.1 | Maintenance of mains | 33,639.24 | 866.71 | 32,772.53 | | | 32,772.53 |
| 773.2 | Maintenance of pumping and regulating equipment | 5,506.28 | 41.81 | 5,464.47 | | | 5,464.47 |
| 773.3 | Maintenance of services | 16,653.11 | 42.60 | 16,610.51 | | | 16,610.51 |
| 773.4 | Maintenance of meters | 35,672.43 | 798.56 | 34,873.87 | | | 34,873.87 |
| 773.5 | Maintenance of house regulators | 184.64 | | 184.64 | | | 184.64 |
| 773.6 | Maintenance of other property on customer's premises | 301.49 | | 301.49 | | | 301.49 |
| 774 | Maintenance of street lighting equipment | 10.36 | | 10.36 | | | 10.36 |
| 775 | Maintenance of other distribution equipment | 1,106.24 | | 1,106.24 | | | 1,106.24 |
| | Total distribution maintenance | 103,468.38 | 1,855.16 | 101,613.22 | | | 101,613.22 |

Italic figures denote decrease.

*Operating expenses showing adjustments for the year 1940*—Continued

| Account No. | Account | Per books | Less former reserve gas company (agreed) | Hope Natural Gas Company (stipulation) | F. P. C. adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|
| | | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| | Miscellaneous: | | | | | | |
| 776 | Rents | $732.00 | | $732.00 | | | $732.00 |
| | Direct distribution expenses—transferred | | | | $251,505.20 | | 251,505.20 |
| | Total distribution expenses | 218,760.50 | $3,632.53 | 215,127.97 | 251,505.20 | | 466,633.17 |
| | *Customers' Accounting and collecting expenses* | | | | | | |
| 779 | Supervision | 22,197.29 | 442.38 | 21,754.91 | | | 21,754.91 |
| 780.1 | Customers' contracts and orders | 9,904.66 | | 9,904.66 | | | 9,904.66 |
| 780.2 | Credit investigation and records | 35.00 | | 35.00 | | | 35.00 |
| 780.3 | Meter reading | 37,751.78 | 2,592.12 | 35,159.66 | | | 35,159.66 |
| 780.4 | Collecting | 37,231.37 | 823.67 | 36,407.70 | | | 36,407.70 |
| 781 | Customers' billing and accounting | 37,656.82 | 53.56 | 37,603.26 | | $588.69 | 37,014.57 |
| 782 | Miscellaneous expenses | 7,025.00 | 524.09 | 6,500.91 | | 420.32 | 6,080.59 |
| 783 | Uncollectible accounts | 8,131.37 | | 8,131.37 | | | 8,131.37 |
| 784 | Rents | 331.50 | | 331.50 | | | 331.50 |
| | Total customers' accounting and collecting expenses | 160,264.79 | 4,435.82 | 155,828.97 | | 1,009.01 | 154,819.96 |
| | *Sales promotion* | | | | | | |
| 785 | Supervision | | | | | | |
| 786 | Salaries and commissions | 5,593.46 | | 5,593.46 | | | 5,593.46 |
| 787.1 | Demonstration | | | | | | |
| 787.2 | Advertising | 63.00 | | 63.00 | | | 63.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total sales promotion expenses | 6,088.80 | | 6,088.80 | | | 6,088.80 |
| | *Administrative and general expenses* | | | | | | |
| 790 | Salaries of general officers and executives | 70,359.34 | | 70,359.34 | | 15,534.74 | 54,824.60 |
| 791 | Other general office salaries | 350,322.58 | | 350,322.58 | | 62,948.11 | 287,374.47 |
| 792.1 | Expenses of general officers | 4,844.26 | | 4,844.26 | | 1,979.60 | 2,864.66 |
| 792.2 | Expenses of general office employees | 36,686.29 | 8,262.10 | 28,424.19 | | 23,531.54 | 4,892.65 |
| 793 | General office supplies and expenses | 80,142.44 | 2,379.90 | 77,762.54 | | 18,134.89 | 59,627.65 |
| 794 | Management and supervision fees and expenses | 82.56 | *35,562.29* | *35,479.73* | | | *35,479.73* |
| 795 | Special services | 7,695.96 | | 7,695.96 | | 46.20 | 7,649.76 |
| 796 | Special legal services | 16,983.82 | | 16,983.82 | | | 16,983.82 |
| 797 | Regulatory commission expenses | 359,475.35 | | 359,475.35 | | 341,978.25 | 17,497.10 |
| 798 | Insurance | 7,981.08 | 397.20 | 7,583.88 | | | 7,583.88 |
| 799 | Injuries and damages | 2,571.92 | | 2,571.92 | | | 2,571.92 |
| 800.1 | Employees' welfare expenses | 356,492.21 | 20,049.21 | 336,443.00 | | 4,081.85 | 332,361.17 |
| 800.2 | Pensions | 123,269.13 | 3,305.09 | 119,964.04 | | | 119,964.04 |
| 801 | Miscellaneous general expenses | 389,606.39 | 3,557.64 | 386,048.75 | | 322,482.97 | 63,565.78 |
| 802.1 | Maintenance of structure and improvements | 6,022.97 | | 6,023.97 | | | 6,023.97 |
| 802.2 | Maintenance of office furniture and equipment | 3,341.14 | | 3,341.14 | | | 3,341.14 |
| 802.3 | Maintenance of communication equipment | 29,727.32 | 3,251.95 | 26,475.37 | | 598.29 | 25,877.08 |
| 803 | Rents | 9,570.24 | | 9,570.24 | | 9,570.24 | |
| 805 | Franchise requirements | 12,230.55 | | 13,230.55 | | 13,230.55 | |
| 807 | Administrative and general expenses transferred—Cr | *141,092.78* | *3,075.80* | *138,017.78* | | | *138,017.78* |
| | Total administrative and general expenses | 1,727,513.77 | 72,690.38 | 1,653,623.39 | | 814,117.21 | 839,506.18 |
| | Total operating expenses | 14,989,759.77 | 488,134.84 | 14,501,624.93 | 885,620.15 | 2,451,128.25 | 12,936,126.83 |

Italic figures denote decrease.

## HOPE NATURAL GAS COMPANY

*Gas Service Revenues—per Books and as Adjusted, 1940*

| Account No. | Account | Total sales | | | Amount per books | Less-former Reserve Gas Company [1] | Hope Natural Gas Company | Examiners' adjustments | | As adjusted |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Number of accounts, Dec. 31, 1940 | Volume MCF [1] | Average rate per MCF | | | | Dr. | Cr. | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
| 600 | Residential sales | 40,984 | 4,712,841 | $0.3731 | $1,758,415.77 | $19,661.54 | $1,738,754.23 | | | $1,738,754.23 |
| 602.1 | Commercial sales | 3,523 | 766,198 | .3742 | 286,733.56 | 657.81 | 286,075.75 | | | 286,075.75 |
| 602.2 | Industrial sales | 196 | 5,332,781 | .2537 | 1,352,823.48 | 27.27 | 1,352,796.21 | | | 1,352,796.21 |
| 603 | Public street and highway lighting | 3 | 584 | .3856 | 225.20 | | 225.20 | | | 225.20 |
| 604 | Sales to other public authorities | 2 | 629 | .3334 | 209.69 | | 209.69 | | | 209.69 |
| 605.1 | Sales to other gas utilities (affiliated): | | | | | | | | | |
| | The East Ohio Gas Company | 1 | | | | | | | | |
| | Regular gas | | 29,468,639 | .3850 | 11,345,426.05 | 1,088.15 | 11,344,337.90 | | | 11,344,337.90 |
| | Special industrial gas | | 10,907,452 | .3100 | 3,381,310.12 | | 3,381,310.12 | | | 3,381,310.12 |
| | The Peoples Natural Gas Company | 1 | 9,738,612 | .3850 | 3,749,365.65 | | 3,749,365.65 | $292,158.36 | | 3,457,207.29 |
| | The River Gas Company | 1 | 391,859 | .3500 | 137,150.65 | | 137,150.65 | | | 137,150.65 |
| 605.2 | Sales to other gas utilities (nonaffiliated): | | | | | | | | | |
| | Fayette County Gas Company | 1 | 859,106 | .3150 | 270,618.42 | | 270,618.42 | | | 270,618.42 |
| | Manufacturers Light & Heat Company | 1 | 2,241,684 | .3150 | 706,130.48 | | 706,130.48 | | | 706,130.48 |
| | Northwestern Ohio Natural Gas Co. | 1 | 4,003,570 | .3000 | 1,201,071.00 | 1,201,071.00 | | | | |
| | The Ohio Fuel Gas Company | 1 | 29,380 | .3000 | 8,814.00 | 8,814.00 | | | | |
| | Other Sales to Other Gas Utilities (nonaffiliated) | 4 | 55,726 | .1915 | 10,933.99 | | 10,933.99 | | | 10,933.99 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 608 | Other sales: | | | | | | | | | |
| | Drillers and pumpers | 112 | 368,004 | .2816 | 103,638.60 | 2,818.00 | 100,820.60 | [1]$73,644.14 | | 27,176.46 |
| | Hope Construction & Refining Company: | | | | | | | | | |
| | Exchange gas | | | | | | | 73,644.14 | [1]$73,644.14 | |
| | Gasoline plants | 1 | 20,001 | .3000 | 6,000.30 | | 6,000.30 | 6,000.30 | | |
| | South Penn Natural Gas Company | 1 | 158,704 | .1229 | 19,503.63 | | 19,503.63 | | | 19,503.63 |
| | Total gas service revenues | 44,833 | 60,055,779 | .3524 | 24,338,370.59 | 1,234,137.77 | 23,104,232.82 | 445,446.94 | 73,644.14 | 22,732,430.02 |

[1] Volumes shown are on contract basis.

[2] Volumes of gas applicable to former Reserve Gas Company sales:

| Class of sale: | MCF |
|---|---|
| Residential | 75,618 |
| Commercial | 2,532 |
| Industrial | 105 |
| The East Ohio Gas Company | 3,109 |
| Northwestern Ohio Natural Gas Co | 4,003,570 |
| The Ohio Fuel Gas Company | 20,380 |
| Drillers and Pumpers | 13,779 |
| Total | 4,128,093 |

[1] No reclassification entry was made for this transfer of exchange gas from 1 classification to another for the purpose of this schedule. It represents the exchange of 265,444 MCF of gas.

## Hope Natural Gas Company

*Gas Purchased, 1940*

| Vendor | Contract number | Per books | | | Examiners' adjustments | | | | As adjusted | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Debit | | Credit | | | | |
| | | MCF | Rate per MCF | Amount | MCF | Amount | MCF | Amount | MCF | Rate per MCF | Amount |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) |
| Boone County Coal Corporation | 1048 | 912,081 | 0.1468 | $133,873.99 | | | | | 912,081 | 0.1468 | $133,873.99 |
| Godfrey L. Cabot, Inc | 384 | 6,275,933 | .14032 | 880,638.92 | | | | | 6,275,933 | .14032 | 880,638.92 |
| Do | 606 | 3,594,782 | .1775 | 638,022.37 | | | | | 3,594,782 | .1775 | 638,022.37 |
| Do | 800 | 323,693 | .2500 | 80,923.25 | | | | | 323,693 | .2500 | 80,923.25 |
| Do | 989–1019 | 31,623 | .1200 | 3,794.76 | | | | | 31,623 | .1200 | 3,794.76 |
| Do | 1084 | 16,636 | .0700 | 1,164.52 | | | | | 16,636 | .0700 | 1,164.52 |
| Do | 1107 | 954,579 | .1350 | 128,868.18 | | | | | 954,579 | .1350 | 128,868.18 |
| Total | | 11,197,246 | .1548 | 1,733,412.00 | | | | | 11,197,246 | .1548 | 1,733,412.00 |
| Columbia Carbon Company | 1046–1047 | 64,752 | .1200 | 7,770.24 | | | | | 64,752 | .1200 | 7,770.24 |
| Do | 618 | 1,029,095 | .2449 | 252,062.12 | | | | | 1,029,095 | .2449 | 252,062.12 |
| Do | 657 | 6,505,094 | .1664 | 1,082,760.34 | | | | | 6,505,094 | .1664 | 1,082,760.34 |
| Do | 759 | 70,590 | .2000 | 14,118.00 | | | | | 70,590 | .2000 | 14,118.00 |
| Total | | 7,669,531 | .1769 | 1,356,710.70 | | | | | 7,669,531 | .1769 | 1,356,710.70 |
| Delaware Gas Company | 1002 | 395,014 | .2000 | 79,002.80 | | | | | 395,014 | .2000 | 79,002.80 |
| Domestic Coke Corporation | 452 | 1,585,058 | .1800 | 285,310.44 | | | | | 1,585,058 | .1800 | 285,310.44 |
| South Penn Natural Gas Co | 587 | 10,953,518 | .2200 | 2,409,773.96 | | | | | 10,953,518 | .2200 | 2,409,773.96 |
| Hamilton Gas Corporation | 658–767 | 1,539,001 | .2000 | 307,800.20 | | | | | 1,539,001 | .2000 | 307,800.20 |
| V. L. and J. H. Hogner | 871 | 253,964 | .2500 | 63,491.00 | | | | | 253,964 | .2500 | 63,491.00 |
| Pond Oil and Gas Co | 819–792 | 844,504 | .1800 | 152,010.72 | | | | | 844,504 | .1800 | 152,010.72 |
| Pure Oil Company | 656 | 2,106,518 | .2500 | 526,629.50 | | | | | 2,106,518 | .2500 | 526,629.50 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| United Carbon Company | 659-780 | 327,264 | .2000 | 65,452.80 | | | | | 327,264 | .2000 | 65,452.80 |
| Do | 1106 | 1,051,502 | .1350 | 141,952.78 | | | | | 1,051,502 | .1350 | 141,952.78 |
| Total | | 1,378,766 | .1504 | 207,405.58 | | | | | 1,378,766 | .1504 | 207,405.58 |
| West Virginia Gas Corp | 613 | 1,154,061 | .1800 | 207,730.98 | | | | | 1,154,061 | .1800 | 207,730.98 |
| Do | 1097 | 2,716,691 | .1312 | 356,365.96 | | | | | 2,716,691 | .1312 | 356,365.96 |
| Total | | 3,870,752 | .1457 | 564,096.94 | | | | | 3,870,752 | .1457 | 564,096.94 |
| Hope Construction and Refining Company | 198 | 1,440 | .0900 | 129.60 | | | | | | | |
| Do | 456 | 1,052,630 | .1909 | 200,976.78 | | | | | | | |
| Do | 676 | 5,673 | .2114 | 1,199.25 | | | | | | | |
| Do | 1027 | 716 | .1050 | 75.21 | | | | | | | |
| Do | 1098 | 34,139 | .1700 | 5,803.63 | | | | | | | |
| Total | | 1,094,598 | .1902 | 208,184.47 | | | | | | | |
| Less Reserve Gas Company Stipulation | | 36,295 | .1655 | 6,008.44 | | | | | | | |
| Net | | 1,058,303 | .1910 | 202,176.03 | 792,859 | $95,143.08 | 1,058,303 | 202,176.03 | 792,859 | .1200 | 95,143.08 |
| Total 32 contracts | | 43,764,256 | .1833 | 8,021,603.86 | 792,859 | 95,143.08 | 1,058,303 | 202,176.03 | 43,498,812 | .1820 | 7,914,660.91 |
| All others | | 5,730,280 | .1324 | 758,473.65 | | | | | 5,730,280 | .1324 | 758,473.65 |
| Less Reserve Gas Company Stipulation | | 144,292 | .1152 | 16,625.37 | | | | | 144,292 | .1152 | 16,625.37 |
| Net | | 5,585,988 | .1328 | 741,848.28 | | | | | 5,585,988 | .1328 | 741,848.28 |
| Total Gas Purchased | | 49,350,244 | .1776 | 8,763,542.14 | 792,859 | 95,143.08 | 1,058,303 | 202,176.03 | 49,084,800 | .1764 | 8,656,509.19 |
| Less Adjustment on Domestic Coke Corporation | | 1,585,058 | .1800 | 285,310.44 | | | | | 1,585,058 | .1800 | 285,310.44 |
| Gas purchased for resale | | 47,765,186 | .1775 | 8,478,231.70 | 792,859 | 95,143.08 | 1,058,303 | 202,176.03 | 47,499,742 | .1762 | 8,371,198.75 |

## HOPE NATURAL GAS COMPANY

*Summary of taxes paid and accrued for year 1940, showing adjustments for taxes over or under accrued as per final settlements*

| Kind of tax | Paid or accrued during year | | | Less Reserve Gas Co. taxes | Balance | Examiners' adjustments | Total chargeable to tax expense | Other adjustments | Adjusted taxes |
|---|---|---|---|---|---|---|---|---|---|
| | Applicable to— | | Total | | | | | | |
| | Current year | Other years | | | | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| Federal: | | | | | | | | | |
| Income | $1,000,000.00 | | $1,000,000.00 | $71,207.16 | $928,792.84 | *$16,480.00* | $912,312.84 | | $912,312.84 |
| Capital stock | 55,000.00 | $13,015.00 | 68,015.00 | | 68,015.00 | *13,015.00* | 55,000.00 | | 55,000.00 |
| Old-age insurance, 1939 | | 800.28 | 800.28 | | 800.28 | *800.28* | | | |
| Old-age insurance | 39,491.64 | | 39,491.64 | 2,644.47 | 36,847.17 | | 36,847.17 | | 36,847.17 |
| Unemployment comp., 1937 | | 757.97 | 757.97 | | 757.97 | *757.97* | | | |
| Unemployment comp., 1938 | | 788.07 | 788.07 | | 788.07 | *788.07* | | | |
| Unemployment comp | 11,847.49 | | 11,847.49 | 816.19 | 11,031.30 | | 11,031.30 | | 11,031.30 |
| West Virginia: | | | | | | | | | |
| Unemployment comp | 106,938.73 | | 106,938.73 | 7,649.07 | 99,289.66 | | 99,289.66 | | 99,289.66 |
| | | | | | | | | $11,164.29 | |
| Property | 814,546.06 | | 814,546.06 | 61,882.06 | 752,664.00 | | 752,664.00 | 2,980.18 | 738,519.53 |
| Public service comm. fee | 15,315.32 | | 15,315.32 | 709.69 | 14,605.63 | *55.03* | 14,550.60 | 14,550.60 | |
| Charter (capital stock) | 2,500.00 | | 2,500.00 | | 2,500.00 | | 2,500.00 | | 2,500.00 |
| Gross sales, 1939 | | 550.86 | 550.86 | | 550.86 | *550.86* | | | |
| | | | | | | [1] *41,354.28* | | | |
| Gross sales | 442,000.00 | | 442,000.00 | 44,937.05 | 397,062.95 | [1] *312.53* | 356,041.20 | [1] 134,132.62 | 221,908.58 |
| Pennsylvania: | | | | | | | | | |
| Unemployment comp | 4,112.31 | | 4,112.31 | | 4,112.31 | | 4,112.31 | | 4,112.31 |
| Corporate net income, 1935 | | 361.54 | 361.54 | | 361.5 | *361.54* | | | |
| Corporate net income, 1939 | | 786.52 | 786.52 | | 786.52 | *786.52* | | | |
| Corporate net income | 2,782.13 | | 2,782.13 | | 2,782.13 | | 2,782.13 | 2,782.13 | |
| Foreign franchise, 1939 | | *16.29* | *16.29* | | *16.29* | *16.29* | | | |
| Foreign franchise | 1,819.20 | | 1,819.20 | | 1,819.20 | | 1,819.20 | 1,819.20 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| City taxes: | | | | | | | | | |
| Parkersburg license | 10.50 | | 10.50 | | 10.50 | | 10.50 | 10.50 | |
| Clarksburg license | 19.25 | | 19.25 | | 19.25 | | 19.25 | 19.25 | |
| Weston license | 13.00 | | 13.00 | | 13.00 | | 13.00 | 13.00 | |
| Mannington sales | 422.50 | | 422.50 | | 422.50 | | 422.50 | 422.50 | |
| Mercantile—Various cities | 19.00 | | 19.00 | | 19.00 | | 19.00 | 19.00 | |
| Total | 2,496,837.13 | 17,043.95 | 2,513,881.08 | 189,845.69 | 2,324,035.39 | 74,600.73 | 2,249,434.66 | 167,913.27 | 2,081,521.39 |
| Less—Charged to other accounts | 49,366.82 | | 49,366.82 | 2,129.13 | 47,237.69 | | 47,237.69 | | 47,237.69 |
| Total—Charged to tax expense | 2,447,470.31 | 17,043.95 | 2,464,514.26 | 187,716.56 | 2,276,797.70 | 74,600.73 | 2,202,196.97 | 167,913.27 | 2,034,283.70 |

[1] Production and sales tax billed others under the terms of sales contracts.
[2] Underaccrued.
[3] *Adj. No.*

| | | Amount |
|---|---|---|
| 241 | Distribution tax | $133,338.30 |
| 241 | Sales—Tangible material | 503.96 |
| 241 | Rents | 52.44 |
| 236 | Interest | 237.92 |
| | Total | 134,132.62 |

Italic figures denote decrease.

## Hope Natural Gas Company

*Summary of utility plant investment as at Dec. 31, 1940, showing 1940 additions and retirements after examiner's reclassification of account 100-6, by accounts*

| | Investment per books at Jan. 1, 1940, as reclassified by examiner | | | | | 1940 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Account 100-1—Utility plant in service | | | Acct. 100-6, utility plant in process of reclassification | Total | Additions | Retirements | | Balance per books as at 12/31/40 (as reclassified) |
| | Total | Less reserve acquisition | Balance | | | | 100-1 | 100-6 | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| Natural gas production plant: | | | | | | | | | |
| 330-1 Natural gas producing lands | | | | $23,522.05 | $23,522.05 | | | | $23,522.05 |
| 330-2 Natural gas producing leaseholds, operated | $1,6[illegible]1.92 | $1,640.92 | | 1,301,824.55 | 1,301,824.55 | $482.17 | | $23,192.25 | 1,279,114.47 |
| 330-4 Rights-of-way | 5,2[illegible]8.85 | 60.47 | $5,148.38 | 523,349.97 | 528,498.35 | 3,810.26 | | 6,089.92 | 526,218.69 |
| 330-5 Other land and land rights | | | | | | | | | |
| 331-1 Gas well structures | 15.93 | | 15.93 | | 15.93 | 187.39 | | | 203.32 |
| 331-2 Field meas. and reg. station structures | 1,302.38 | 293.82 | 1,008.56 | 29,832.90 | 30,841.46 | 4,727.05 | $32.99 | 1,372.19 | 34,163.33 |
| 331-3 Other production system structures | 3,308.51 | | 3,308.51 | 171,877.45 | 175,186.96 | 10,997.15 | 253.67 | 9,476.92 | 176,452.52 |
| 332-1 Producing gas wells, well construction | 106,320.45 | 2,21[illegible].79 | 104,109.66 | 4,237,022.99 | 4,341,132.65 | 253,906.28 | 9,373.86 | 131,360.09 | 4,454,304.98 |
| 332-2 Producing gas wells, well equipment | 84,929.95 | 6,356.61 | 78,583.34 | 7,626,941.82 | 7,705,525.16 | 169,570.34 | 10,075.32 | 222,278.59 | 7,642,741.59 |
| 333-1 Field lines | 153,990.07 | 5,134.05 | 148,856.02 | 10,786,383.76 | 10,935,239.78 | 239,620.18 | 3,357.24 | 176,297.10 | 10,995,205.62 |
| 333-2 Field meas. and reg. station equipment | 11,234.28 | 1,811.63 | 9,422.65 | 198,127.96 | 207,550.61 | 5,658.10 | 895.38 | | 212,313.33 |
| 334 Drilling and cleaning equipment | 89,353.78 | 6,129.97 | 83,223.81 | 333,652.77 | 416,876.58 | 64,522.10 | 31,803.79 | 18,661.69 | 430,933.20 |
| 337 Other production equipment | 2,730.49 | 600.45 | 2,130.04 | 26,962.21 | 29,092.25 | 9,126.89 | | | 38,219.14 |
| Total natural gas production plant | 460,045.61 | 24,238.71 | 435,806.90 | 25,259,698.43 | 25,695,505.33 | 762,937.91 | 55,792.25 | 588,728.75 | 25,813,392.24 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Transmission plant: | | | | | | | | | | |
| 351-12 Land | 900.00 | | 900.00 | 152,960.08 | 153,860.08 | 3,382.27 | | 901.50 | 156,040.82 | |
| 351-23 Rights-of-way | 783.52 | 17.39 | 766.13 | 551,354.41 | 552,120.54 | 1,121.00 | | 1,310.33 | 551,931.21 | |
| 352-2 Compressor station structures | 4,168.25 | 2,467.38 | 1,700.87 | 1,759,311.84 | 1,761,012.71 | 65,407.12 | | 20,451.77 | 1,805,963.06 | |
| 352-3 Meas. and reg. station structures | 1,749.09 | | 1,749.09 | 5,155.15 | 6,904.24 | 3,050.02 | 287.08 | 7.20 | 9,665.98 | |
| 352-4 Other transmission system structures | 765.74 | | 765.74 | 6,704.81 | 7,470.55 | 954.57 | | | 8,425.12 | |
| 353 Mains | 114,206.06 | 6,897.51 | 107,308.55 | 14,578,358.33 | 14,685,666.88 | 238,746.99 | 39.58 | 48,798.86 | 14,875,575.43 | |
| 354-2 Compressor station equipment | 93,385.59 | 46,475.76 | 46,909.83 | 8,042,390.35 | 8,089,300.18 | 421,572.88 | 25.00 | 122,082.86 | 8,388,765.20 | |
| 354-3 Meas. and reg. station equipment | 9,213.15 | 7.67 | 9,205.48 | 9,219.00 | 18,424.48 | 529.85 | 466.49 | | 18,487.84 | |
| 354-4 Other transmission system equipment | 6,609.58 | 1,122.42 | 5,487.16 | | 5,487.16 | 6,900.31 | 2,291.13 | | 10,096.34 | |
| Total transmission plant | 231,780.98 | 56,988.13 | 174,792.85 | 25,105,153.94 | 25,279,946.79 | 741,666.01 | 3,109.28 | 193,552.52 | 25,824,951.00 | |
| General plant: | | | | | | | | | | |
| 370 Land and land rights | | | | 158,769.60 | 158,769.60 | 20.69 | | 850.00 | 157,940.29 | |
| 371 Structures and improvements | 4,476.78 | | 4,476.78 | 250,843.14 | 255,319.92 | 261,352.59 | | 11,202.48 | 505,470.03 | |
| 372 Office furniture and equipment | 11,925.95 | | 11,925.95 | 235,808.32 | 247,824.27 | 49,023.07 | 2,391.82 | 31,874.59 | 262,580.93 | |
| 373 Transportation equipment | 49,656.18 | | 49,656.18 | 175,535.67 | 225,191.85 | 43,328.47 | 4,531.14 | 19,869.58 | 244,119.60 | |
| 374 Stores equipment | 25.83 | | 25.83 | | 25.83 | | | | 25.83 | |
| 375 Shop equipment | 7,633.17 | | 7,633.17 | | 7,633.17 | 9,472.48 | 148.89 | | 16,956.76 | |
| 376 Laboratory equipment | 160.22 | | 160.22 | | 160.22 | | | | 160.22 | |
| 377 Tools and work equipment | 1,457.37 | | 1,457.37 | 436,248.34 | 437,705.71 | 1,259.14 | 1,457.37 | 19,407.65 | 418,099.83 | |
| 378 Communication equipment | 10,248.20 | 1,375.60 | 8,872.60 | 243,687.45 | 252,560.05 | 41,752.65 | 76.84 | 12,956.55 | 282,279.31 | |
| 379 Miscellaneous equipment | | | | 19,898.38 | 19,898.38 | | | | 19,898.38 | |
| Total general plant | 85,583.70 | 1,375.60 | 84,208.10 | 1,520,880.90 | 1,605,089.00 | 406,209.09 | 8,606.06 | 95,160.85 | 1,907,531.18 | |
| Total gas plant (exclusive of distr. plt.) | 777,410.29 | 82,602.44 | 694,807.85 | 51,885,533.27 | 52,580,341.12 | 1,910,483.01 | 67,507.50 | 877,442.12 | 53,545,874.42 | |
| 25 Distribution plant | 149,401.69 | 1,716.25 | 147,685.44 | 2,753,575.22 | 2,901,260.66 | 243,490.55 | 4,462.74 | 53,339.50 | 3,089,948.97 | |
| Total gas plant | 926,811.98 | 84,318.69 | 842,493.29 | 54,639,108.49 | 55,481,601.78 | 2,153,973.56 | (4) 71,970.33 | 927,781.62 | 56,635,823.39 | |
| 100.3 Construction work in progress | 398,286.55 | 2,012.74 | 396,273.81 | | 396,273.81 | 72,952.88 | | | 469,226.69 | |

## HOPE NATURAL GAS COMPANY—Continued

*Summary of utility plant investment as at Dec. 31, 1940, showing 1940 additions and retirements after examiner's reclassification of account 100-6, by accounts*—Continued

| | Investment per books at Jan. 1, 1940, as reclassified by examiner | | | | | 1940 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Account 100-1—Utility plant in service | | | Acct. 100-6 Utility plant in process of reclassification | Total | Additions | Retirements | | Balance per books as 12/31/40 (as reclassified) |
| | Total | Less reserve acquisition | Balance | | | | 100-1 | 100-6 | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| 100-4 Unoperated leaseholds | $21,933.09 | $22.34 | $21,910.75 | $462,526.90 | $484,437.65 | $12,704.69 | | $13,751.68 | $483,390.65 |
| | 1,347,031.62 | 86,353.77 | 1,260,677.85 | 55,101,635.39 | 56,362,313.24 | 2,239,631.12 | 71,970.33 | 941,533.30 | 57,588,440.73 |
| Reserve Gas Co. acquisition: | | | | | | | | | |
| 100-1 Utility plant in service (classified) | | | 86,353.77 | | 86,353.77 | | | | 86,353.77 |
| 100-6 Utility plant in process of reclassification | | | | 7,335,767.68 | 7,335,767.68 | | | 283,309.23 | 7,052,458.45 |
| Total gas plant | 1,347,031.62 | | 1,347,031.62 | 62,437,403.07 | 63,784,434.69 | 2,239,631.12 | 71,970.33 | 1,224,842.53 | 64,727,252.95 |
| 116 Other physical property—Coal property | | | | (1)341,281.68 | 341,281.68 | | | | 341,281.68 |
| 146 Other deferred debits—Contracts for gas | | | | (2) 23,915.61 | 23,915.61 | | | | 23,915.61 |
| | | | 1,347,031.62 | 62,802,600.36 | 64,149,631.98 | 2,239,631.12 | 71,970.33 | 1,224,842.53 | 65,092,450.24 |
| 271 Earned surplus | | | | (3) 6,267.94 | 6,267.94 | | | 186.30 | 6,021.64 |
| | | | 1,347,031.62 | 62,808,868.30 | 64,155,899.92 | 2,239,631.12 | 71,970.33 | 1,225,028.83 | 65,098,471.88 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Summary: | | | | | | | | |
| Totals - Exclusive of reserve acquisition | | 1, 260, 677. 85 | 55, 473, 040. 62 | 56, 733, 718. 47 | 2, 239, 631. 12 | (4) 71, 970. 33 | 941, 719. 66 | 57, 959, 659. 66 |
| Reserve acquisitich | | 86, 453. 77 | 7, 335, 767. 68 | 7, 422, 121. 45 | | | (283, 309. 23. | 7, 138, 812. 22 |
| Grand totals | | 1, 347, 031. 62 | 62, 808, 808. 30 | 64, 155, 839. 92 | 2, 239, 631. 12 | 71, 970. 33 | 1, 225, 028. 83 | 65, 098, 471. 88 |

Notes:

(1) Reclassified, as shown, by examiners blce. sheet jnl. entry No. 100, at 12/31/38.

(2) Reclassified, as shown, by examiners blce. sheet jnl. entry No. 101, at 12/31/38.

(3) Chgd. to surplus, as shown, by examiners blce. sheet jnl. entry No. 101, at 12/31/38.

(4) Although no check has been attempted it seems likely that retirements of classified Reserve Gas Company acquisitions may be included in this amount.

HOPE NATURAL GAS COMPANY

*Depletion and Depreciation Expense for the Year Ended Dec. 31, 1940*

| Particulars | Plant balance, Jan. 1, 1940 | Depreciation rate | Deple. and deprec. exp., year 1940 |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| Natural gas production plant: | | | |
| R-of-W and field line labor | $4,312,320.58 | Deple | $175,004.0 |
| Structures | 210,393.60 | 4.17% | 8,773.4 |
| Fd. line mat'l and stat. equipment | 7,887,851.72 | 2.22% | 175,110.3 |
| Operated acreage | 1,570,191.83 | Deple | 57,084.0 |
| Gas well equipment | 7,468,118.73 | 2.50% | 186,702.9 |
| Gas well construction | 4,088,489.32 | Deple | 286,492.0 |
| Cost of abandoning gas wells | | Deple | 105,860.0 |
| Drilling and cleaning equipment | 625,013.96 | Clearing acct.[1] | |
| Total, nat. gas prod. plant | 26,162,379.74 | | 995,026.9 |
| Transmission plant: | | | |
| Mains mat'l, labor and equipment | 14,631,829.54 | 1.56% | 228,296.5 |
| Structures | 1,458,921.09 | 2.50% | 36,473.0 |
| Compressor station equipment | 7,637,298.30 | 2.56% | 195,514.8 |
| Total, transmission plant | 23,728,048.93 | | 460,244.4 |
| General plant: | | | |
| Structures and improvements | 218,602.40 | 2.17% | 4,743.6 |
| Office furniture and equipment | 186,518.29 | 4.00% | 7,460.7 |
| Other equipment | 111,036.48 | 3.57% | 3,964.7 |
| Communication equipment | 246,933.62 | 3.85% | 9,506.8 |
| Transportation equipment | 156,390.93 | Clearing acct.[1] | |
| Total, general plant | 919,501.72 | | 25,676.0 |
| Subtotal | 50,809,930.39 | | 1,480,947.3 |
| Nondepreciable plant: | | | |
| Natural-gas-producing lands | 3,319.84 | | |
| Other land and land rights | 20,801.29 | | |
| Transmission land | 163,812.21 | | |
| General plant land and land rights | 101,159.99 | | |
| Total, nondepreciable plant | 289,093.33 | | |
| Total, gas plant in service (exclusive of distrib. plant). | 51,099,023.72 | | 1,480,947.3 |

[1] Depreciation expense on these accounts is distributed through clearing accounts. It is not considered necessary, or practicable, to revise company's depreciation accounting.

## HOPE CONSTRUCTION AND REFINING COMPANY

*West Virginia Gasoline Earnings, per Books and as Adjusted, Year Ended Dec. 31, 1940*

| Particulars | Per books | Examiners adjustments | As adjusted |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| Sales: | | | |
| Gallons sold | 18,094,389 | | 18,094,389 |
| Average price per gallon | $0.0288 | | $0.0288 |
| Amount | 521,949.77 | | 521,949.77 |
| Expenses: | | | |
| Production expense: | | | |
| Contract gas | 62,435.67 | *$62,435.67* | |
| Less: Vapor fuel earnings | *119,592.32* | 119,592.32 | |
| Net cost of gas purchased | *57,156.65* | 57,156.65 | |
| Labor | 52,139.07 | | 52,139.07 |
| Fuel and power | 125,592.62 | | 125,592.62 |
| Other production expenses | 98,649.40 | | 98,649.40 |
| Total direct production exp | 219,224.44 | 57,156.65 | 276,381.09 |
| Overhead | 26,805.27 | | 26,805.27 |
| Taxes | 6,355.37 | | 6,355.37 |
| Depreciation | 49,497.68 | 25,245.42 | 74,743.10 |
| Total indirect production exp | 82,658.32 | 25,245.42 | 107,903.74 |
| Total production expense | 301,882.76 | 82,402.07 | 384,284.83 |
| Gasoline purchased | 8,777.52 | | 8,777.52 |
| Inventory fluctuations | 1,392.42 | | 1,392.42 |
| Total cost of gasoline sold | 312,052.70 | 82,402.07 | 394,454.77 |
| Shipping, handling, and storage exp | 40,515.78 | 1,328.72 | 41,844.50 |
| Administrative and general exp | 22,521.25 | | 22,521.25 |
| Federal income tax | 28,000.00 | | 28,000.00 |
| Other miscellaneous charges and crs | 2,936.16 | | 2,936.16 |
| Total expense | 406,025.89 | 83,730.79 | 489,756.68 |
| Net earnings | 115,923.88 | *83,730.79* | *32,193.09* |

*Italic figures denote decrease.*

## HOPE CONSTRUCTION AND REFINING COMPANY

*Butane Department Earnings per Books and as Adjusted Year Ended Dec. 31, 1940*

| Particulars | Per books | Examiners adjustments | As adjusted |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| Sales: | | | |
| Gallons sold | 5,018,992 | | 5,018,992 |
| Average price per gallon | $0.0619 | | $0.0619 |
| Amount | 310,902.68 | | 310,902.68 |
| Expenses: | | | |
| Production expense: | | | |
| Contract gas | 25,957.50 | *25,957.50* | |
| Less: Vapor fuel earnings | | | |
| Net cost of gas purchased | 25,957.50 | *25,957.50* | |
| Labor | 4,173.47 | | 4,173.47 |
| Fuel and power | | | |
| Other production expenses | 6,215.01 | | 6,215.01 |
| Total direct production expense | 36,345.98 | *25,957.50* | 10,388.48 |
| Overhead | 3,957.73 | | 3,957.73 |
| Taxes | 1,990.44 | | 1,990.44 |
| Depreciation | 12,452.43 | *506.95* | 11,945.48 |
| Total indirect production expense | 18,370.60 | *506.95* | 17,863.65 |
| Total production expense | 54,716.58 | *26,464.45* | 28,252.13 |
| Butane purchased | 337.55 | | 337.55 |
| Inventory fluctuations | *6,124.90* | | *6,124.90* |
| Total cost of butane sold | 48,929.23 | *26,464.45* | 22,464.78 |
| Shipping, handling and storage expense | 31,528.51 | *26.69* | 31,501.82 |
| Marketing expense | 9,499.96 | | 9,499.96 |
| Administrative and general expense | 12,130.75 | | 12,130.75 |
| Federal income tax | 35,000.00 | | 35,000.00 |
| Other miscellaneous charges and credits | *238.94* | 246.15 | 7.21 |
| Total expense | 136,849.51 | *26,244.99* | 110,604.52 |
| Net earnings | 174,052.57 | 26,244.99 | 200,297.56 |

Italic figures denote decrease.

29 Docket G-513 Schedule No. 9b

## HOPE CONSTRUCTION AND REFINING COMPANY

### *Earnings Statement—Adjusting Entries Year 1940*

| | Dr. | Cr. |
|---|---|---|
| 1 | | |
| Hope Natural Gas Company | $88,393.17 | |
| Operating expenses—Gasoline—W. Va. | | $62,435.67 |
| Operating expenses—Butane | | 25,957.50 |
| To reverse the royalty paid to the above company on the contractual basis of ⅛ of the net gasoline sales for the year 1940. This royalty was charged to gasoline and butane expenses under account "Gas Purchased." The purpose of this entry is to present the net revenue of the West Virginia gasoline and butane departments excluding royalties. | | |
| 2 | | |
| Operating expenses—Gasoline—W. Va. | 119,592.32 | |
| Hope Natural Gas Company | | 119,592.32 |
| To reverse the charges against the above company for vent gases returned to that company. According to the Commission Engineers these vent gases are the property of the Hope Natural Gas Company and no charge should have been made by the Hope Construction and Refining Company for the return of these gases. The revenue derived from this charge was credited to gasoline operating expenses, account "Vapor Fuel Earnings." | | |
| 3 | | |
| Operating expenses—Gasoline—W. Va. | 78,676.95 | |
| Operating expenses—Butane | 12,574.19 | |
| Operating expenses—Gasoline—W. Va. | | 52,102.81 |
| Operating expenses—Butane | | 12,861.68 |
| Surplus | | 26,286.65 |
| To reverse entries recording annual depreciation, profits, or loss on plant and equipment retired, and profit or loss on sale of capital assets, and to set up depreciation expense on West Virginia gasoline and butane investment based on rates furnished by Commission Engineers, per the following detail: | | |

| | Per books | Per examiners | Adjustment |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| Year 1940: | | | |
| Operating expenses—gasoline—W. Va.: | | | |
| Production expense depreciation | $49,497.68 | $74,743.10 | $25,245.42 |
| Shipping, handling, and storage expense, depreciation | 2,605.13 | 3,933.85 | 1,328.72 |
| Total | 52,102.81 | 78,676.95 | 26,574.14 |
| Operating expenses—butane: | | | |
| Production expense depreciation | 12,452.43 | 11,945.48 | *506.95* |
| Shipping, handling and storage expense depreciation | 655.40 | 628.71 | *26.69* |
| Profit or loss from sale of capital assets | *246.15* | | 246.15 |
| Total | 12,861.68 | 12,574.19 | *287.49* |
| Total year 1940 | 64,964.49 | 91,251.14 | 26,286.65 |

Italic figures denote decrease.

31 Docket G-113 Schedule No. 6

HOPE CONSTRUCTION AND REFINING COMPANY

*West Virginia Gasoline and Butane Investment and Related Reserve for Depreciation—Year 1940*

| Investment | | Adjusted plant investment | | | |
|---|---|---|---|---|---|
| | | Balance Jan. 1 | Additions | Retirements | Balance Dec. 31 |
| (a) | | (b) | (c) | (d) | (e) |
| Other West Virginia plants | | $1,429,952.34 | $20,014.15 | $45,170.90 | $1,404,795.59 |
| Kennedy plant | | 258,876.66 | 932.71 | 188.59 | 259,620.78 |
| Butane | | 261,663.62 | 2,214.84 | 530.24 | 263,348.22 |
| Total | | 1,950,492.62 | 23,161.70 | 45,889.73 | 1,927,764.59 |
| | | Computed reserve for depreciation | | | |
| | | Balance Jan. 1 | Provision | Salvage | Retirements | Balance Dec. 31 |
| 4.79 Other W. Va. plants | | $1,085,281.08 | $67,892.21 | $1,537.14 | $45,170.90 | $1,109,539.53 |
| 4.16 Kennedy plant | | 207,322.21 | 10,784.74 | 192.62 | 188.59 | 218,110.98 |
| 4.79 Butane | | 156,651.54 | 12,574.19 | 457.22 | 530.24 | 169,152.71 |
| | | 1,449,254.83 | 91,251.14 | 2,186.98 | 45,889.73 | 1,496,803.22 |
| | | Average investment | | | |
| | | Total | West Virginia | Kennedy | Butane |
| Average investment | | $1,939,128.60 | $1,417,373.96 | $259,248.72 | $262,505.92 |
| Reserve for depreciation | | 1,473,029.02 | 1,097,410.30 | 212,716.59 | 162,902.13 |
| Average net investment | | 466,099.58 | 319,963.66 | 46,532.13 | 99,603.79 |
| Working capital | | 80,000.00 | | | |
| Cost of sites | | 16,629.53 | | | |
| Total investment | | 562,729.11 | | | |

Docket G-113 Schedule No. 9d

HOPE CONSTRUCTION AND REFINING COMPANY

*Kennedy Plant Net Earnings and Investment, Years 1939 and 1940*

| Particulars | Year | |
|---|---|---|
| | 1939 | 1940 |
| Sales: | | |
| Gallons sold | 3,173,397 | 2,761,780 |
| Average price per gallon | $0.0319 | $0.0227 |
| Amount | 101,256.05 | 62,824.86 |
| Expenses: | | |
| Direct production expense (1) | 16,568.22 | 14,963.49 |
| Indirect production expense (2) | 14,250.51 | 14,750.91 |
| Other expenses (3) | 19,310.50 | 19,276.24 |
| Total expense | 50,129.23 | 48,990.64 |
| Net earnings | 51,126.82 | 13,834.22 |
| 6% of net investment | 3,349.23 | 2,791.93 |
| Difference | 47,777.59 | 11,042.29 |
| Average investment | 257,799.62 | 259,248.72 |
| Average reserve for depreciation | 201,979.08 | 212,716.59 |
| Average net investment | 55,820.54 | 46,532.13 |
| (1) Per books, excluding royalty | 12,657.02 | 7,801.51 |
| (2) Amounts allocated on following bases: | | |
| Overhead—direct labor | 2,527.98 | 2,993.08 |
| Taxes—investment | 998.07 | 973.08 |
| Depreciation—as calculated | 10,724.46 | 10,784.75 |
| Total | 14,250.51 | 14,750.91 |
| (3) Amounts allocated on following bases: | | |
| Shipping, handling, and storage—gallons produced | 6,281.21 | 5,865.54 |
| Administrative and general—direct charges | $1,172.95 | $1,219.30 |
| Federal income tax—net earnings before taxes | 11,360.02 | 12,032.44 |
| Other miscellaneous—direct charges | 496.32 | 158.96 |
| Total | 19,310.50 | 19,276.24 |

## Hope Construction and Refining Company

*Gasoline Sales by Plants, Year Ended Dec. 31, 1940*

| Plant | Sales to Standard Oil Co. of N. J. | | | Sales to others | | | Total sales | | |
|---|---|---|---|---|---|---|---|---|---|
| | Gallons | Average price | Amount | Gallons | Average price | Amount | Gallons | Average price | Amount |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| West Virginia: | | | | | | | | | |
| Bristol | 198,232 | $0.0100 | $1,960.61 | 798,394 | $0.0322 | $25,670.03 | 996,626 | $0.0278 | $27,660.64 |
| Cornwell | | | | 554,875 | .0341 | 18,944.26 | 554,875 | .0341 | 18,944.26 |
| Field and Drip | 100,493 | .0182 | 1,837.54 | 382,505 | .0215 | 8,225.25 | 482,998 | .0208 | 10,062.79 |
| Goff | 286,924 | .0160 | 4,585.46 | 432,604 | .0327 | 14,136.64 | 719,528 | .0260 | 18,722.10 |
| Hastings | 2,095,210 | .0210 | 44,019.84 | 8,633,725 | .0322 | 277,819.62 | 10,728,935 | .0300 | 321,839.46 |
| Kennedy | 878,905 | .0084 | 7,401.64 | 1,882,875 | .0295 | 55,421.22 | 2,761,780 | .0227 | 62,824.86 |
| Waverly | 48,924 | Adj. | 369.10 | 1,372,733 | .0325 | 44,621.52 | 1,420,757 | .0317 | 44,990.62 |
| Total | 3,607,788 | .0167 | 60,204.19 | 14,057,711 | .0316 | 444,840.54 | 17,665,499 | .0286 | 505,044.73 |
| Purchased gasoline: | | | | | | | | | |
| Sistersville repressuring unit | 16,181 | Adj. | 4,726.71 | 412,709 | .0295 | 12,178.33 | 428,890 | .0394 | 16,905.04 |
| Total West Virginia | 3,623,969 | .0179 | 64,930.90 | 14,470,420 | .0316 | 457,018.87 | 18,094,389 | .0288 | 521,949.77 |
| Pennsylvania: | | | | | | | | | |
| Brave | 1,522,871 | .0113 | 17,189.88 | 4,531,663 | .0278 | 126,168.32 | 6,054,534 | .0237 | 143,358.20 |
| Imperial | | | | 54,780 | .0411 | 2,250.80 | 54,780 | .0411 | 2,250.80 |
| Jen-Guffey | | | | 117,732 | .0573 | 6,750.83 | 117,732 | .0573 | 6,750.83 |
| Total Pennsylvania | 1,522,871 | .0113 | 17,189.88 | 4,704,175 | .0287 | 135,169.95 | 6,227,046 | .0245 | 152,359.83 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Ohio: | | | | | | | | | |
| Ludlow | | | | 507, 870 | .0340 | 17, 277. 07 | 507, 870 | .0340 | 17, 277. 07 |
| Total sales | 5, 146, 840 | .0160 | 82, 120. 78 | 19, 682, 465 | .0310 | 609, 465. 89 | 24, 829, 305 | .0279 | 691, 586. 67 |

*Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940*

| Entry No. | Description | Net adjustment | 605.1, sales to other gas util. (aff.) | 608; other sales | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) |
| | Accounts 600–608 gas service revenues: | | | | | | | | | | |
| 202 | Eliminating compressing refund—Brave station | $292,158.36 | $292,158.36 | | | | | | | | |
| 203 | Eliminating gas delivered to H. C. & R. Co. for oil operations | 73,644.14 | | $73,644.14 | | | | | | | |
| 213 | Reversing value placed on vent gas to H. C. & R. Co. | 6,000.30 | | 6,000.30 | | | | | | | |
| | Total | 371,802.80 | 292,158.36 | 79,644.44 | | | | | | | |
| | | | 610, rent from gas prop. | 617.1 Rev. from process. nat. gas | 617.2 | 619.3, management fees and exp. | 619.6, gas sales cont. adj. | | | | |
| | | | | Contract gas | Butane gas | | | | | | |
| | Accounts 610–619, other gas revenues: | | | | | | | | | | |
| 208 | Transfer of W. Va. prod. and sales taxes | 41,334.28 | | | | | $41,334.28 | | | | |
| 211 | Elimination and concurrent credit to operating expenses and other accounts | 109,834.45 | *$18,440.56* | | | $122,274.81 | | | | | |
| 214 | Reversing sale of contract and butane gas to H. C. & R. Co. | 80,591.66 | | 54,634.16 | $25,957.50 | | | | | | |
| | Total | 231,760.39 | *18,440.56* | 54,634.16 | 25,957.50 | 122,274.81 | 41,334.28 | | | | |

| | | | 733, oper. supervy. and engineering | 734.2, field line labor | 734.3, fd. meas. & reg. stat. labor | 734.4, other prod. labor | 735.2, field line supp. & exp. | 735.3, fd meas. & reg. stat supp. & exp. | 741, maint of pro. gas well equip. | 747.1, residuals produced, cr. | 747.2, residuals operating exp. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Accounts 733-749, natural gas production: | | | | | | | | | | |
| 211 | Management fees and expenses transferred | *12,579.69* | *$8,815.71* | | *$564.85* | *$3,010.11* | | | *$189.04* | | |
| 215 | Gasoline and butane sales made by H. C. & R. Co. | *852,851.05* | | | | | | | | *$852,851.05* | |
| 216 | Expenses incurred by H. C. & R. Co., incident to extraction operations | 600,361.20 | | | | | | | | | $600,361.20 |
| 217 | Return on investment to H. C. & R. Co., incident to extraction operations | 33,763.75 | | | | | | | | | $3,763.75 |
| 223 | To eliminate alloc. costs arising from trans. of coke oven gas to Hastings Station | *1,981.60* | | *$525.54* | *1,204.62* | | *$56.90* | *$194.54* | | | |
| | Total | *$15,287.59* | *8,815.71* | *525.54* | *1,769.45* | *3,010.11* | *56.90* | *194.54* | *189.04* | *852,851.05* | 634,124.95 |

| | | | 754.11, nat. gas purch. from affil. cos. | 755.1, purch. gas oper. labor | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Accounts 754-757, other production expenses: | | | | | | | | | | |
| 203 | Eliminating gas returned from H. C. & R. Co. used for oil operations | *67,008.05* | *$67,008.05* | | | | | | | | |
| 211 | Management fees and expenses transferred | *5,194.50* | | *$5,194.50* | | | | | | | |
| 218 | Eliminate book cost of natural gas purchased from H. C. & R. Co. | *135,167.98* | *135,167.98* | | | | | | | | |
| 219 | Reinstate adjusted cost of natural gas purchased from H. C. & R. Co. | 95,143.08 | 95,143.08 | | | | | | | | |
| | Total | *112,287.35* | *107,052.95* | *5,194.50* | | | | | | | |

Italic figures denote decrease.

## *Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940*—Continued

| Entry No. | Description | Net adjustment | 759.111, Pumping station labor | 759.1211, Pump. station supp. & exp. | 759.1212, Pump. station fuel | 759.21, Oper. of trans., mains—labor | 759.22, Oper. of trans., mains—supp. & exp. | 759.24, Other trans. system exp. | 761.1, Maint. of pump. stat struct. | 762.1, Maint. of mains | 762.21, Maint. of pump. stat. equipt. | 764.2, Joint exp. cr. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) |
| | Accounts 758-764 transmission expenses: | | | | | | | | | | | | | |
| 202 | Eliminating compressing refund—Brave station | $292,158.86 | | $292,158.86 | | | | | | | | | | |
| 203 | Differential of gas supplied to and returned by H. C. & R. Co | 6,636.09 | | | | | | | | | | $6,636.09 | | |
| 211 | Management fees and expenses transferred | 1,967.97 | | | | | | $1,951.30 | | | $16.67 | | | |
| 213 | Adj.-H. C. & R. Co. for gas & steam furnished | 125,592.62 | | | $125,592.62 | | | | | | | | | |
| 220 | Eliminate book cost of coke oven gas furnished by Domestic Coke Corp | 285,510.44 | | | 285,510.44 | | | | | | | | | |
| 222 | To eliminate direct costs arising from trans. of coke oven gas to Hastings station | 30,842.68 | 19,142.21 | 5,905.78 | | | | | 4,767.24 | | 3,327.45 | | | |
| 223 | To eliminate allec. costs arising from trans. of coke oven gas to Hastings station | 3,158.11 | | | | $1,944.63 | $89.08 | | | $1,104.40 | | | | |
| 224 | To reinstate in oper. exp. value of coke oven gas used at Hastings station for boiler fuel | 68,683.83 | | | 68,683.83 | | | | | | | | | |
| | Total | 676,302.44 | 19,142.21 | 298,764.64 | 519,786.89 | 1,944.63 | 89.08 | 1,951.30 | 4,767.24 | 1,104.40 | 3,344.12 | 6,636.09 | | |

| | | | Direct distr. exp. transf'd | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Accounts 765-777 distribution expenses: | | | | | | | | | | | | | |
| 240 | Admin. and general expenses adjusted | 13,230.55 | 13,230.55 | | | | | | | | | | | |
| 241 | Taxes expense adjusted | 148,929.55 | 148,929.55 | | | | | | | | | | | |
| 243 | Depreciation adjusted | 89,345.10 | 89,345.10 | | | | | | | | | | | |
| | Total | 251,505.20 | 251,505.20 | | | | | | | | | | | |
| | | | 781, Cust. billing and acct'g. | 782, Miscellaneous expenses | | | | | | | | | | |
| | Accounts 779-784 customers' accounting & collecting exp.: | | | | | | | | | | | | | |
| 211 | Management fees and exp. transferred | 1,009.01 | 588.69 | 420.32 | | | | | | | | | | |
| | Total | 1,009.01 | 588.69 | 420.32 | | | | | | | | | | |
| | | | 790, Sal. of gen'l off. and exec. | 791, Other gen'l office sal. | 792.1, Expenses of gen'l officers | 792.2, Exp. of gen'l off. empl. | 793, Gen'l office supp. & exp. | 795, Special services | 797, Regulatory comm. exp. | 800.1, Employees welfare exp. | 801, Misc'l. gen'l expenses | 802.3, Maint. of comm. equipt. | 803, Rents | 805, Franchise requirements |
| | Accounts 790-809 administrative and general expenses: | | | | | | | | | | | | | |
| 211 | Management fees and expenses transferred | 89,049.76 | 15,554.74 | 62,948.11 | | | 81,896.41 | 846.20 | | 4,081.85 | 84,555.76 | | | |
| 212 | Reclassification, original cost and river rate expenditures suspended | 624,041.30 | | | | | | | 941,978.25 | | 282,065.05 | | | |
| 223 | To eliminate alloc. costs arising from trans. of coke oven gas to Hastings station | 598.29 | | | | | | | | | | 598.29 | | |
| 237 | To eliminate certain donations from operating expenses | 2,145.75 | | | | | | | | | 2,145.75 | | | |
| 238 | To segregate certain expenses considered nonrecurring | 85,058.27 | | | 1,979.90 | 25,551.54 | 16,258.48 | | | | 33,788.41 | | 9,570.94 | |
| 240 | To transfer direct distribution expenses | 13,230.55 | | | | | | | | | | | | 15,230.55 |
| | Total | 814,117.21 | 15,554.74 | 62,948.11 | 1,979.90 | 25,551.54 | 18,154.89 | 46.20 | 941,978.25 | 4,081.85 | 392,482.97 | 598.29 | 9,570.94 | 15,230.55 |

Italic figures denote decrease.

## *Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940*—Continued

| Entry No. | Description | Net adjustment | 503.1, Depreciation | 503.2, Amort. and depl. prod. N. G. L. & L. R. | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
| | Accounts 503–506 depreciation and depletion: | | | | | | | | | |
| 243 | To trans. portion applying to distri. sys. | $89,545.10 | $89,545.10 | | | | | | | |
| 245 | To reverse the prov. for deprec. and depl. | 1,258,457.19 | 1,220,073.33 | $18,383.86 | | | | | | |
| 246 | To set up deprec. and depl. as per study | 1,480,947.16 | 1,423,863.16 | 57,084.00 | | | | | | |
| | Total | 153,144.87 | 114,444.73 | 38,700.14 | | | | | | |
| | | | Allocated to transport coke oven gas | Fed. income tax adj. | W. Va. gross sales tax adj. | Misc'l. Fed. and State taxes adj. | Taxes transf. to nonoper. rev. | W. Va. sales and purch. taxes | Penna. inc. foreign and corp. tax | Taxes transf. to distr. exp. |
| | Account 507, taxes: | | | | | | | | | |
| 208 | Transfer of W. Va. taxes billed others | 41,334.28 | | | | | | $41,334.28 | | |
| 223 | To eliminate alloc. costs arising from trans. of coke oven gas to Hastings Station | 11,164.29 | $11,164.29 | | | | | | | |
| 226 | To adjust for over accrual of Fed. income tax for 1940 | 16,480.00 | | $16,480.00 | | | | | | |
| 227 | To trans. taxes paid in and charged to 1940 oper. that are applicable to prior years | 17,098.98 | | | | $17,098.98 | | | | |
| 228 | To provide for under accrual of W. Va. gross sales tax 1940 | 312.53 | | | $312.53 | | | | | |
| 236 | To eliminate taxes, not applicable to natural gas operations | 5,218.10 | | | | | $5,218.10 | | | |
| 239 | To segregate certain Pa. taxes as nonrec. | 4,601.53 | | | | | | | $4,601.53 | |
| 241 | To transfer direct distribution taxes | 148,929.55 | | | | | | | | $148,929.55 |
| | Total | 248,514.00 | 11,164.29 | 16,480.00 | 312.53 | 17,098.98 | 5,218.10 | 41,334.28 | 4,601.53 | 148,929.55 |

| | | | 512, Abandoned leases | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Accounts 510-513 exploration and development costs: | | | | | | | | | |
| 248 | Recorded losses for abandoned leases | 12,422.43 | 12,422.43 | | | | | | | |
| | Total | 12,422.43 | 12,422.43 | | | | | | | |
| | | | 792.1, Expenses of gen'l. off. | 792.2, Exp. of gen'l. office empl. | 793, General office supplies & exp. | 801, Miscellaneous gen'l. exp. | 803, Rents | 507, Taxes | | |
| | Nonrecurring expenses: | | | | | | | | | |
| 238 | Admin. and gen'l. expenses transferred | 85,058.27 | 1,979.60 | 23,531.54 | 16,238.48 | 33,738.41 | 9,570.24 | | | |
| 239 | Taxes expense transferred | 4,601.33 | | | | | | 4,601.33 | | |
| | Total | 89,659.60 | 1,979.60 | 23,531.54 | 16,238.48 | 33,738.41 | 9,570.24 | 4,601.33 | | |
| | | | 527, Nonoper. rev. deduct. | | | | | | | |
| | Accounts 520-527 other income: | | | | | | | | | |
| 236 | Taxes not applicable to nat. gas oper. | 3,218.10 | 3,218.10 | | | | | | | |
| | Total | 3,218.10 | 3,218.10 | | | | | | | |

Italic figures denote decrease.

## *Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940*—Continued

| Entry No. | Description | Net adjustment | 538, Misc'l. inc. deductions | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Accounts 530–538 income deductions: | | | | | | | | |
| 218 | Reverse book cost of nat. gas purch. from H. C. & R. Co. | $135,167.98 | $135,167.98 | | | | | | |
| 219 | Reinstate corrected cost of nat. gas purchased from H. C. & R. Co. | *95,145.08* | *95,145.08* | | | | | | |
| 220 | Reverse book cost of coke oven gas used at Hastings and Gallagher Stations | 285,310.44 | 285,310.44 | | | | | | |
| 222 | Elimination of direct costs from oper. exp. attributable to trans. of coke oven gas | 30,842.68 | 30,842.68 | | | | | | |
| 223 | Elimination of alloc. costs from oper. exp. attributable to trans. of coke oven gas | 16,882.29 | 16,882.29 | | | | | | |
| 224 | Reinstate corrected cost of coke oven gas used as boiler fuel at Hastings Stat. | *68,685.85* | *68,685.85* | | | | | | |
| 237 | Elimin. of certain donations from oper. exp. | 2,145.75 | 2,145.75 | | | | | | |
| | Total | 306,522.23 | 306,522.23 | | | | | | |
| | | | 126.2, Receiv. from assoc. cos. | 145.4, Other work in prog. - stores exp. | 146, Other deferred debits | 228, Taxes accrued | 250.1, Res. for dep'r. of gas plant | 250.2, Res. for depl. of P. N. G. L. & L. R. | 271, Surplus begin. of year |
| | Balance sheet accounts: | | | | | | | | |
| 211 | Management fees and expenses transferred | *640.45* | | *640.45* | | | | | |
| 212 | Suspension of reclassification, original cost and river rate expenditures | 624,041.30 | | | $624,041.30 | | | | |
| 213 | Reversing value of steam, etc. furnished by H. C. & R. Co. for extraction purposes | 119,592.32 | $119,592.32 | | | | | | |
| 214 | Reversing charges to H. C. & R. Co. for contract and butane gas | *80,591.66* | *80,591.66* | | | | | | |
| 215 | To charge H. C. & R. Co. with sale of gasoline and butane extracted | 832,851.05 | 832,851.05 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 216 | To credit H. C. & R. Co. with expenses incurred thru extraction operations | *600,561.80* | *600,561.80* | | | | | | |
| 217 | To credit H. C. & R. Co. with return on prop. used for extraction purposes | *55,765.75* | *55,765.75* | | | | | | |
| 226 | Overaccrual of Fed. inc. taxes for year 1940 | 16,480.00 | | | | $16,480.00 | | | |
| 227 | Taxes paid in and charged to 1940 operations and applicable to prior years | 17,098.98 | | | | | | | $17,098.98 |
| 228 | Underaccrual of taxes at Dec. 31, 1940 | *512.55* | | | | *512.55* | | | |
| 245 | To reverse provisions for deprec. & depl | 1,238,457.19 | | | | | $1,238,457.19 | | |
| 246 | To set up deprec. & depl. as per study | *1,480,947.16* | | | | | *1,485,863.16* | *$57,084.00* | |
| 248 | To transfer recorded losses for abandoned leases | *12,422.45* | | | | | *12,422.54* | | |
| | Total | 639,481.68 | 237,726.76 | *640.45* | 624,041.30 | 16,167.47 | *197,828.40* | *57,084.00* | 17,098.98 |

Italic figures denote decrease

38 JOURNAL ENTRIES

39 Docket G-113

HOPE NATURAL GAS COMPANY

*Examiners' Adjusting Entries*

ENTRY NO. 202

| | Dr. | Cr. |
|---|---|---|
| 605.1 Sales to other gas utilities (affiliated) | $292,158.36 | |
| 759.1211 Pumping station supplies and expenses | | $292,158.36 |
| To reduce revenues and expenses by the amount paid to The Peoples Natural Gas Co. in consideration for compressing gas sold to that company, under the provisions of the sales contract dated May 8, 1937, etc. | | |
| This entry and entries following are given the same numbers as the comparable entry appearing in F. P. C. Exhibit 67A. | | |

| Year | Sales MCF | Compressed by Peoples MCF |
|---|---|---|
| 1940 | 9,738,612 | 9,738,612<br>.03 |
| | | $292,158.36 |

ENTRY NO. 203

| | Dr. | Cr. |
|---|---|---|
| 608 Other sales | $73,644.14 | |
| 754.11 Natural gas purchased from affiliated companies | | $67,008.05 |
| 764.2 Joint transmission expenses—Cr | | 6,636.09 |
| To reduce revenues and expenses by the amount of gas exchanged with Hope Construction and Refining Company during the year 1940, and recorded on the books as purchases and sales of gas, etc. | | |

| Year | Total MCF | Total sales, Amount | Repurchase, Amount | Difference |
|---|---|---|---|---|
| 1940 | 265,444 | $73,644.14 | $67,008.05 | $6,636.09 |
| | 265,444 @ $.02½ = $6,636.09 | | | |

40 ENTRY NO. 208

| | Dr. | Cr. |
|---|---|---|
| 619.6 Miscellaneous gas revenues—Gas sales contract adjustments | $41,334.28 | |
| 507 Taxes, 1940 | | $41,334.28 |
| West Virginia production and sales taxes billed others as provided in sales contracts, etc. | | |

ENTRY NO. 211

| | | Dr. | Cr. |
|---|---|---|---|
| 619.3 | Management fees and expenses | $122,274.81 | |
| 145.4 | Other work in progress—Stores suspense | | $640.43 |
| 610 | Rent from gas property | | 12,440.36 |
| 733 | Operation supervision and engineering | | 8,815.71 |
| 734.3 | Field measuring and regulating station labor | | 564.83 |
| 734.4 | Other production labor | | 3,010.11 |
| 741 | Maintenance of producing gas well equipment | | 189.04 |
| 755.1 | Purchased gas operating labor | | 5,194.30 |
| 759.24 | Other transmission system expense | | 1,351.30 |
| 762.21 | Maintenance of pumping station equipment | | 16.67 |
| 781 | Customers' billing and accounting | | 588.69 |
| 782 | Miscellaneous expenses | | 420.32 |
| 790 | Salaries of general offices and executives | | 15,534.74 |
| 791 | Other general office salaries | | 62,948.11 |
| 793 | General office supplies and expenses | | 1,896.41 |
| 795 | Special services | | 46.20 |
| 800.1 | Employees' welfare expenses | | 4,081.83 |
| 801 | Miscellaneous general expenses | | 4,535.76 |
| | To adjust the above balance sheet, operating revenue, and operating expense accounts as at Dec. 31, 1940, in order that the actual net expense be reflected, etc. | | |

ENTRY NO. 212

| | | | |
|---|---|---|---|
| 146 | Other deferred debits | $624,041.30 | |
| 797 | Regulatory commission expenses | | $341,978.25 |
| 801 | Miscellaneous general expenses | | 282,063.05 |
| | To suspend the expenditures incurred during the year 1940 as shown by memorandum accounts for company's reclassification of property and river rate investigation in the general ledger, etc. | | |



ENTRY NO. 213

| | | | |
|---|---|---|---|
| 126.2 | Receivables from associated companies, Hope Construction and Refining Company | $119,592.32 | |
| 608 | Other sales | 6,000.30 | |
| 759.1212 | Pumping station fuel | | $125,592.62 |
| | To charge Hope Construction and Refining Company with the value placed on steam and gas furnished gasoline plants for extraction purposes, year 1940, etc. See gasoline extraction study for details of entries No. 213 to 217, inclusive, etc. | | |

ENTRY NO. 214

| | | | |
|---|---|---|---|
| 617.1 | Revenue from processed natural gas—Cont. gas | $54,634.16 | |
| 617.2 | Revenue from processed natural gas—Butane gas | 26,957.50 | |
| 126.2 | Receivables from associated companies, Hope Construction and Refining Company | | $80,591.66 |
| | To credit Hope Construction and Refining Company with the value per books representing royalties, year 1940, etc. | | |

ENTRY NO. 215

| | Dr. | Cr. |
|---|---|---|
| 126.2 Receivables from associate companies | $832,851.05 | |
| 747.1 Residuals produced—credit | | $832,851.05 |
| To record in residuals produced account the revenue from sales of gasoline and butane that were extracted, etc. | | |

42

ENTRY NO. 216

| | | |
|---|---|---|
| 747.2 Residuals operating expenses | $600,361.20 | |
| 126.2 Receivables from associated companies Hope Construction and Refining Company | | $600,361.20 |
| To record in residuals produced operation account the expenses incident to production and sale of gasoline and butane, etc. | | |

ENTRY NO. 217

| | | |
|---|---|---|
| 747.2 Residuals operating expenses | $33,763.75 | |
| 126.2 Receivables from associated companies | | $33,763.75 |
| To record in residuals produced operation account the return on investment allowed Hope Construction and Refining Company, etc. | | |

43

ENTRY NO. 218

| | | | |
|---|---|---|---|
| 538 Miscellaneous income deductions | | $135,167.98 | |
| 754.11 Natural gas purchased from affiliated companies | | | $135,167.98 |
| To eliminate the balance recorded as cost of natural gas purchased from Hope Construction and Refining Company, this balance being amount remaining in Account 754.11 after giving effect to exchange gas adjustment by Entry No. 203. | | | |
| | *MCF* | | |
| Contract No. 456 | 1,052,630 | | |
| Exchange gas adjustment [1] | 265,444 | | |
| Contract No. 456 (net) | 787,186 | | |
| Contract Nos. 198, 676, 1027, and 1098 | 41,968 | | |
| | 829,154 | | |
| Less stipulation, Contract Nos. 198, 1027, and 1098 | 36,295 | | |
| Net MCF subject to adjustment | 792,859 | | |
| | *Value* | | |
| Purchases | $141,176.42 | | |
| Exchange gas | 67,008.05 | | |
| Total per books | 208,184.47 | | |
| Less stipulation, Contract Nos. 198, 1027, and 1098 | $6,008.44 | | |
| Exchange gas | 67,008.05 | | |
| | 73,016.49 | | |
| Value subject to adjustment | 135,167.98 | | |

[1] See Entry No. 203.

ENTRY NO. 219

| | | Dr. | Cr. |
|---|---|---|---|
| 734.11 | Natural gas purchases from affiliated companies | $95,143.08 | |
| 538 | Miscellaneous income deductions | | $95,143.08 |
| To reinstate the amount computed as cost of natural gas purchased from Hope Construction and Refining Company, based on the unit price that was recommended by the Bureau of Engineering. Details as follows: | | | |
| | *1940* | | |
| | Total MCF | 792,859 | |
| | Unit price | .12 | |
| | Amount | $95,143.08 | |

ENTRY NO. 220

| | | | |
|---|---|---|---|
| 538 | Miscellaneous income deductions | $285,310.44 | |
| 739.1212 | Pumping station fuel | | $285,310.44 |
| To eliminate from the operating expenses of the company charges made by Domestic Coke Corporation for coke oven gas used at Hastings and Gallagher Stations, etc. | | | |
| | | *MCF 1940* | |
| | Hastings Station | 1,259,986 | |
| | Gallagher Station | 325,072 | |
| | Total MCF | 1,585,058 | |
| @ $0.18 | | $285,310.44 | |

ENTRY NO. 222

| | | | |
|---|---|---|---|
| 538 | Miscellaneous income deductions | $30,842.68 | |
| 739.111 | Pumping station labor | | $19,142.21 |
| 739.1211 | Pumping station supplies and expenses | | 3,605.78 |
| 761.1 | Maintenance of pumping station structures | | 4,767.24 |
| 762.21 | Maintenance of pumping station equipment | | 3,327.45 |
| To eliminate from operating expenses the direct costs arising from the transportation of coke oven gas to Hastings Station, etc. | | | |



ENTRY NO. 223

| | | | |
|---|---|---|---|
| 538 | Miscellaneous income deductions | $16,882.29 | |
| 734.2 | Field line labor | | $525.54 |
| 735.2 | Field line supplies and expenses | | 56.90 |
| 734.3 | Field measuring and regulating station—labor | | 1,204.62 |
| 735.3 | Field measuring and regulating station—supplies and expenses | | 194.54 |
| 739.21 | Operation of transmission mains—labor | | 1,944.63 |
| 739.22 | Operation of transmission mains—supplies and expenses | | 89.08 |
| 762.1 | Maintenance of mains | | 1,104.40 |
| 802.3 | Maintenance of communication equipment | | 598.29 |
| 907 | Taxes—1940 | | 11,164.29 |
| To eliminate from operating expenses additional expenses and taxes applicable to the transportation of coke oven gas not considered in company Exhibit No. 37., etc. | | | |

ENTRY NO. 224

| | Dr. | Cr. |
|---|---|---|
| 759.1212 Pumping station fuel | $68,683.83 | |
| 538 *Miscellaneous income deductions | | $68,683.83 |
| To reinstate in operating expenses of the company, the value of coke oven gas used at Hastings Station for boiler fuel, etc. | | |
| *1940* | | |
| MCF 1,259,986 | | |
| Unit price .05455 | | |
| $68,683.83 | | |

46 ***Statement of Adjustments to Operating Expenses and Taxes***

| Property account No. | Original cost of property | | | Operating expenses account No. | Year | Total operating expenses (stipulation) | Ratio applied | Amount of adjustment |
|---|---|---|---|---|---|---|---|---|
| | Total | Used to transport coke oven gas | Ratio | | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| 333.1 | $11,296,741.40 | $50,476.43 | 0.004468 | 734.2 | 1940 | $117,622.76 | 0.004468 | $525.54 |
| 333.1 | | | | 735.2 | 1940 | 12,734.02 | .004468 | 56.90 |
| 333.2 | 184,385.03 | 10,087.67 | .054710 | 734.3 | 1940 | 22,018.32 | .054710 | 1,204.62 |
| 333.2 | | | | 735.3 | 1940 | 3,555.83 | .054710 | 194.54 |
| 333 | 14,132,074.72 | 292,275.72 | .020682 | 759.21 | 1940 | 94,025.39 | .020682 | 1,944.63 |
| 353 | | | | 759.22 | 1940 | 4,307.10 | .020682 | 89.06 |
| 353 | | | | 762.1 | 1940 | 53,399.10 | .020682 | 1,104.40 |
| 378 | 248,975.74 | 5,626.43 | .022598 | 802.3 | 1940 | 26,475.37 | .022598 | 598.29 |
| 100.1 | 51,207,620.64 | 762,592.06 | .014892 | 507 | 1940 | [1] 749,683.82 | .014892 | 11,164.25 |

[1] See the following table.

| | | |
|---|---|---|
| Property taxes | | $814,546.06 |
| Less: | | |
| Reserve Gas Co. | $61,882.06 | |
| Nongas operations | 2,980.18 | |
| | | 64,862.24 |
| Net property taxes | | 749,683.82 |

47 ENTRY NO. 226

| | Dr. | Cr. |
|---|---|---|
| 228 Taxes accrued, Dec. 31, 1940 | $16,480.00 | |
| 507 Taxes, 1940 | | $16,480.00 |
| Overaccrual of Federal income tax for year 1940 based upon tentative 1940 return and payment of $245,880 as of Mar. 15, 1941. Details as follows: | | |
| Total tax accrued per books $1,000,000.00 | | |
| Tentative income-tax return 983,520.00 | | |
| Overaccrual 16,480.00 | | |

ENTRY NO. 227

| | | Dr. | Cr. |
|---|---|---|---|
| 271 Earned surplus, Jan. 1, 1940 | | $17,098.98 | |
| 307 Taxes, 1940 | | | $17,098.98 |
| Taxes paid in 1940 and charged to 1940 operations applicable to prior years. | | | |
| Kind of tax: | *Amount* | | |
| Capital-stock tax, 1939 | $13,015.00 | | |
| Federal old age, 1939 | 800.28 | | |
| Federal unemployment, 1937 | 757.97 | | |
| Federal unemployment, 1938 | 788.07 | | |
| Gross sales, 1939 | 550.86 | | |
| Penna. corp. net income, 1935 | 361.54 | | |
| Penna. corp. net income, 1939 | 786.52 | | |
| Penna. foreign franchise, 1939 | *16.29* | | |
| Public Service Comm. fee, 1939 | 55.03 | | |
| | 17,098.98 | | |

ENTRY NO. 228

| | | Dr. | Cr. |
|---|---|---|---|
| 307 Taxes, 1940 | | $312.53 | |
| 228 Taxes accrued, Dec. 31, 1940 | | | $312.53 |
| Underaccrual of 1940 West Virginia gross sales taxes based on 1940 final return. Details as follows: | | | |
| Total tax per 1940 final return | $442,312.53 | | |
| Taxes accrued per books | 442,000.00 | | |
| Underaccrual | 312.53 | | |

ENTRY NO. 236

| | | Dr. | Cr. |
|---|---|---|---|
| 527 Nonoperating revenue deductions | | $3,218.10 | |
| 307 Taxes, 1940 | | | $3,218.10 |
| Taxes not applicable to gas operations for year 1940: | | | |
| Total taxes paid and accrued | $814,546.06 | | |
| Taxes on gas properties | 811,565.88 | | |
| | [1] 2,980.18 | | |
| Tax on interest revenues | 237.92 | | |
| Taxes not applicable to gas operations | 3,218.10 | | |

[1] This is computed from tax returns to West Virginia Board of Public Works.

Italic figures denote decrease.

ENTRY NO. 237

| | | Dr. | Cr. |
|---|---|---|---|
| 538 | Miscellaneous income deductions | $2,145.75 | |
| 801 | Miscellaneous general expenses | | $2,145.75 |
| | To transfer from the above administrative and general expense account, certain donations made by the company during the year 1940, etc. Details as follows: | | |

| Vo. No.: | Amt. | Vo. No.: | Amt. |
|---|---|---|---|
| B-85 | $50.00 | F-103 | $15.00 |
| B-103 | 100.00 | G-101 | 385.00 |
| C-104 | 100.00 | H-85 | 5.00 |
| C-243 | 5.00 | L-101 | 220.00 |
| D-104 | 48.75 | L-102 | 25.00 |
| D-200 | 2.00 | M-85 | 30.00 |
| E-101 | 10.00 | M-101 | 100.00 |
| E-102 | 50.00 | M-104 | 1,000.00 |
| | | | 2,145.75 |

49

ENTRY NO. 238

| | | Dr. | Cr. |
|---|---|---|---|
| | Nonrecurring expenses | $85,058.27 | |
| 792.1 | Expenses of general officers | | $1,979.60 |
| 792.2 | Expenses of general office employees | | 23,531.54 |
| 793 | General office supplies and expenses | | 16,238.48 |
| 801 | Miscellaneous general expenses | | 33,738.41 |
| 803 | Rents | | 9,570.24 |
| | To set out from operating revenue deductions certain operating expenses of the company that are of a nonrecurring nature. The courses of these expenditures, etc., Details as follows: | | |

| Year | Reference | Description | Amount |
|---|---|---|---|
| 1940 | (1) M38 | Clarksburg moving susp | $532.91 |
| 1940 | (1) M332 | do | 1,446.69 |
| 1940 | (2) M38 | do | 11,051.12 |
| 1940 | (2) M332 | do | 12,480.42 |
| 1940 | (3) M332 | do | 16,238.48 |
| 1940 | (4) D104 | Proportion of cost World's Fair Exposition. | 1,350.00 |
| 1940 | (4) M367 | Loss on experimental liquifying gas plant. | 32,358.41 |
| 1940 | (5) Sundry | Rent at Pitts. office paid P. N. G. Co. | 9,570.24 |
| | | | 85,058.27 |

(1) Account 792.1 Expenses of general officers.
(2) Account 792.2 Expenses of general office employees.
(3) Account 793 General office supplies and expenses.
(4) Account 801 Miscellaneous general expenses.
(5) Account 803 Rents.

30 ENTRY NO. 239

| | | Dr. | Cr. |
|---|---|---|---|
| | Nonrecurring expenses | $4,601.33 | |
| 307 | Taxes, 1940 | | $4,601.33 |

To set out from operating revenue deductions the amount of Pennsylvania State taxes that will not be assessed in future years by virtue of the removal of the company offices from that state, etc. Details as follows:

| Year | Reference | Description | Amount |
|---|---|---|---|
| 1940 | M177 | Penna. foreign franchise | $1,819.20 |
| 1940 | M178 | Penna. Corp. Net Income | 2,782.13 |
| | | | 4,601.33 |

ENTRY NO. 240

| | | Dr. | Cr. |
|---|---|---|---|
| | Distribution expenses | $13,230.55 | |
| 905 | Franchise requirements | | $13,230.55 |

To segregate for the purpose of this report certain administrative and general expenses that are exclusively devoted to the distribution and sale of natural gas in the State of West Virginia, etc. Details as follows:

| Year | Reference | Description | Amount |
|---|---|---|---|
| 1940 | F45 | Gross earnings tax Parkersburg | $9,472.26 |
| 1940 | L104 | Bond Parkersburg tax | 125.00 |
| 1940 | M244 | Gross earnings tax Parkersburg | 3,633.29 |
| | | | 13,230.55 |

51 ENTRY NO. 242

| | | Dr. | Cr. |
|---|---|---|---|
| Distribution expenses | | $148,929.55 | |
| 507 Taxes, 1940 | | | $148,929.55 |
| To segregate taxes specifically applicable to the distribution sales in the State of West Virginia for the purpose of this report. The following taxes are removed, etc: | | | |
| West Virginia gross sales tax: | 1940 | | |
| Sales of tangible material—Retail | $503.96 | | |
| Gas sales | 133,338.30 | | |
| Rents | 52.44 | | |
| Subtotal | 133,894.70 | | |
| Mercantile tax: | | | |
| Various cities | 19.00 | | |
| City license tax: | | | |
| Parkersburg | 10.50 | | |
| Weston | 13.00 | | |
| Clarksburg | 19.25 | | |
| Subtotal | 42.75 | | |
| Mannington privilege tax | 422.50 | | |
| West Virginia Pub. Serv. Comm. fee [1] | 14,530.60 | | |
| | 148,929.55 | | |

[1] Based on gross intrastate sale of gas.

ENTRY NO. 243

| | | | |
|---|---|---|---|
| Distribution expenses | | $89,345.10 | |
| 403.1 Depreciation | | | $89,345.10 |
| To segregate for the purpose of this report the depreciation that applies to the distribution operating property of the company, etc. | | | |

52 ENTRY NO. 245

| | | | |
|---|---|---|---|
| 250.1 Reserve for depreciation of gas plant | | $1,238,437.19 | |
| 403.1 Depreciation | | | $1,220,073.33 |
| 403.2 Amort. and depl. of P. N. G. L. & L. R. | | | 18,363.86 |
| This adjustment is to reverse the provisions for depreciation and depletion, as recorded on the books of the Company for the year ended Dec. 31, 1940, preparatory to setting up the depreciation and depletion expense as computed by the examiners. | | | |

| | Depreciation | Depletion |
|---|---|---|
| Amounts adjusted above | $1,220,073.33 | $18,363.86 |
| Amounts applicable to Reserve Gas Company | 128,967.51 | 6,816.14 |
| Amounts applicable to distribution system | 89,345.10 | |
| | 1,438,385.94 | 25,200.00 |

ENTRY NO. 246

| | Dr. | Cr. |
|---|---|---|
| 503.1 Depreciation | $1,423,883.16 | |
| 503.2 Depletion of P. N. G. L. & L. R. | 57,084.00 | |
| 250.1 Reserve for depreciation of gas plant | | $1,423,883.16 |
| 250.2 Reserve for depletion of P. N. G. L. & L. R. | | 57,084.00 |

To set up in the income statement for 1940 the annual depreciation and depletion expense as computed by the F. P. C. examiners.

The depreciation expense for the year 1940 has been computed on the investment in plant accounts at Jan. 1, 1940, instead of the average investment for the year. Details of additions and retirements for the year 1940 have not been investigated.

53 Depletion expense for the year 1940 has been computed as shown on the attached sheet. The average cost per MCF of gas produced was found for the years 1937, 1938, and 1939 by dividing the annual expense by the annual production. The depletion expense per MCF of gas produced was found to remain practically uniform for the period. Therefore, the average for the above-mentioned years was applied to the estimated production for 1940.

The estimate of 26,800,000 MCF of gas produced in 1940 was determined by the Bureau of Engineering, excluding the estimated production from the former Reserve Gas Company properties.

## Depletion Expense for the Year Ended Dec. 31, 1940

| | Total 1937-1938-1939 | Actual | | | Estimated 1940 |
|---|---|---|---|---|---|
| | | 1937 | 1938 | 1939 | |
| Gas produced—MCF | 51,106,896 | 20,013,836 | 14,546,830 | 16,546,230 | 26,800,000 |
| Annual depletion expense: | | | | | |
| Operated acreage | $109,884.17 | $40,703.36 | $31,407.84 | $36,772.47 | $57,084.00 |
| Average cost per MCF | .00213 | .00203 | .00216 | .00222 | .00213 |
| Field line R/W & constr | 333,841.42 | 131,847.14 | 98,836.35 | 103,157.93 | 175,004.00 |
| Average cost per MCF | .00653 | .00659 | .00679 | .00623 | .00653 |
| Gas well construction | 546,112.41 | 198,255.61 | 165,101.37 | 182,755.43 | 286,492.00 |
| Average cost per MCF | .01069 | .00991 | .01135 | .01105 | .01069 |
| Cost of abandoning | 201,816.68 | 75,833.49 | 56,169.61 | 69,813.58 | 105,860.00 |
| Average cost per MCF | .00395 | .00379 | .00386 | .00422 | .00395 |
| Total depletable plant | 1,190,654.68 | 446,640.10 | 351,515.17 | 392,499.41 | 624,440.00 |
| Average cost per MCF | .02330 | .02232 | .02416 | .02372 | .0233 |

| | Dr | Cr |
|---|---|---|
| 312 Abandoned leases | $12,422.43 | |
| 20.1 Reserve for deprec. of gas plant as of 12/31/41 | | $12,422.43 |
| To transfer from the above reserve account the recorded losses for abandoned leases during the year 1940. This entry is given the same number as the comparable entry appearing in F. P. C. exhibit number 67A. | | |

## EXHIBIT NO. 83-A.—ALLOCATION OF COST OF SERVICE, YEAR 1940, OF THE HOPE NATURAL GAS COMPANY, F. P. C. WITNESS LYON

### WRITTEN EXPLANATORY STATEMENT

This exhibit has been compiled and is presented to show for the year 1940 alone, information similar to that presented in a previous exhibit entitled "Allocation of Average Annual Cost of Service, Years 1937 to 1940, Inclusive, of the Hope Natural Gas Company."

The sources of information and the method of compilation of the tables in this exhibit have been the same as those of the previous exhibit, except as noted, and all statements made in connection with the previous exhibit apply with equal force to these tables. The working papers supporting the tables in this exhibit are the same as those supporting the previous exhibit covering the four years 1937–1940 inclusive.

The allocation of capacity costs in this exhibit, being for the one year 1940, has been based on the actual peak responsibility on the day of January 18, 1940 and the allocation of the volumetric costs has been based on the volume of deliveries during the calendar year 1940.

This exhibit incorporates, with appropriate notation, an additional minor adjustment relative to the elimination of incidental gas revenues of the former Reserve Gas Company during 1940 not made in the four year allocation, in order that this exhibit be in complete conformity with the exhibit of the accounting examiners of the Commission for the operations of the company during the year 1940 exclusive of the former Reserve Gas Company.

Signed WM. H. LYON,
William H. Lyon.

Dated, May 31, 1941, at Washington, D. C.

TABLE I.—*Summary of cost of gas service and comparison with revenues, year 1940*

| | Produced and purchased gas | Exploration and development | Pumping | | Transmission mains regulating and measuring | | Distribution Cust. Accting. and Coll. and sales promotion | Federal income taxes and return @ 6% per annum | Total cost of service | Actual revenue |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Volumetric | Capacity | Volumetric | Capacity | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| Total cost of service with income taxes and return segregated: | | | | | | | | | | |
| West Virginia | $2,071,969.95 | $72,696.73 | $133,662.76 | $88,399.12 | | | $795,713.55 | $391,942.02 | $3,554,384.13 | $3,459,461.90 |
| East Ohio Gas Company | 7,143,057.81 | 250,619.93 | 1,035,682.46 | 585,126.22 | | $578,553.43 | | 1,764,861.66 | 11,357,901.50 | 14,725,648.02 |
| Peoples Natural Gas Company | 1,773,960.53 | 62,237.32 | 183,710.47 | 177,943.85 | | 184,374.43 | | 457,051.40 | 2,839,178.00 | 3,457,207.29 |
| River Gas Company | 71,467.06 | 2,503.90 | 5,912.76 | 9,222.68 | | 15,958.39 | | 23,649.67 | 128,612.46 | 137,150.65 |
| Fayette County Gas Company | 157,786.90 | 5,536.08 | 13,073.00 | 9,465.28 | | 16,378.18 | | 37,898.48 | 240,132.92 | 270,618.42 |
| Manufacturer's Lt. & Ht. Company | 408,316.23 | 14,326.10 | 33,829.92 | 21,225.65 | | 36,727.63 | | 93,753.40 | 608,178.93 | 706,130.48 |
| Total | 11,626,356.48 | 407,920.06 | 1,405,871.37 | 891,382.80 | | 831,992.06 | 795,713.55 | 2,769,151.62 | 18,728,387.94 | 22,756,216.76 |
| Total cost of service with income taxes and return not segregated: | | | | | | | | | | |
| West Virginia | 2,266,929.61 | 72,696.73 | 161,282.50 | 117,208.80 | | | 936,266.49 | (1) | 3,554,384.13 | 3,459,461.90 |
| East Ohio Gas Company | 7,815,175.71 | 250,619.93 | 1,249,693.35 | 775,821.57 | 356,472.39 | 910,118.55 | | (1) | 11,357,901.50 | 14,725,648.02 |
| Peoples Natural Gas Company | 1,940,769.93 | 62,237.32 | 221,671.95 | 235,936.58 | 88,524.04 | 290,038.18 | | (1) | 2,839,178.00 | 3,457,207.29 |
| River Gas Company | 78,080.09 | 2,503.90 | 7,134.56 | 12,228.40 | 3,561.46 | 25,104.05 | | (1) | 128,612.46 | 137,150.65 |
| Fayette County Gas Company | 172,633.69 | 5,536.08 | 15,774.37 | 12,550.07 | 7,874.31 | 25,764.40 | | (1) | 240,132.92 | 270,618.42 |
| Manufacturer's Lt. & Ht. Company | 446,736.29 | 14,326.10 | 40,820.46 | 28,143.18 | 20,376.91 | 57,775.99 | | (1) | 608,178.93 | 706,130.48 |
| Total | 12,720,325.32 | 407,920.06 | 1,696,377.19 | 1,181,888.60 | 476,809.11 | 1,308,801.17 | 936,266.49 | | 18,728,387.94 | 22,756,216.76 |

NOTE.—West Virginia includes domestic, commercial, industrial, drillers and pumpers, and special nonaffiliated gas utilities.

(1) Included in columns (2)-(8) inclusive.

TABLE II.—*Statement of Natural Gas Sales Revenues Year 1940*

| Line No. | Customer | Per books | Accounting adjustments | Less incidental reserve Gas Co. sales [1] | Revenue |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| 1 | Domestic and Commercial | $2,069,232.90 | | *$20,616.09* | $2,048,616.81 |
| 2 | Industrial | 1,353,183.76 | | *27.27* | 1,353,156.49 |
| 3 | Total dom. com. and ind. | 3,422,416.66 | | *20,643.36* | 3,401,773.30 |
| 4 | Drillers and pumpers | 103,713.12 | [2] *73,644.14* | *2,818.09* | 27,250.89 |
| 5 | H. C. & R. Co. gasoline plants | 6,000.30 | [3] *6,000.30* | | |
| 6 | Special nonaffiliated natural gas utilities | 30,437.62 | | | 30,437.62 |
| 7 | East Ohio Gas Co. | 14,726,736.17 | | *1,088.15* | 14,725,648.02 |
| 8 | Peoples Natural Gas Co. | 3,749,365.65 | [4] *292,158.36* | | 3,457,207.29 |
| 9 | River Gas Co. | 137,150.65 | | | 137,150.65 |
| 10 | Fayette County Gas Co. | 270,618.42 | | | 270,618.42 |
| 11 | Manufacturers Lt. & Ht. Co. | 706,130.48 | | | 706,130.48 |
| 12 | Total gas service revenues | [5] 23,152,569.07 | *371,802.80* | *24,549.51* | 22,756,216.76 |

[1] To eliminate incidental gas service revenues of former Reserve Gas Company in conformity with Schedule No. 4, column (g) of exhibit No. 78.

[2] In accordance with exhibit No. 78 examiner's adjusting entry No. 203.

[3] In accordance with exhibit No. 78 examiner's adjusting entry No. 213.

[4] In accordance with exhibit No. 78 examiner's adjusting entry No. 202.

[5] Exclusive of Northwestern Ohio Natural Gas Co. and Ohio Fuel Gas Co.

**Italic figures denote decrease.**

Reconciliation with total gas sales revenues in exhibit of accounting examiners of the commission:

| | |
|---|---|
| Total gas sales revenues above | $22,756,216.76 |
| Less customer's forfeited discounts and penalties | 23,786.74 |
| Total per examiner's exhibit | 22,732,430.02 |

## HOPE NATURAL GAS COMPANY

### TABLE III

### STATEMENT OF ANNUAL VOLUMES OF SALES DELIVERIES M. C. F.

[On uniform pressure base of 8 oz.+14.4#/Sq. In.]
Year 1940

| Customers | F. P. C. exhibit No. 70B | Adjustments | Less: incidental reserve Gas Co. sales [1] | Total |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| Domestic and Commercial | 5,480,252 | [2] 216,084 | *78,150* | 5,618,186 |
| Industrial | 5,332,781 | [2] 213,307 | *105* | 5,545,983 |
| Total dom., com. and ind | 10,813,033 | [3] 429,391 | *78,255* | 11,164,169 |
| Drillers and Pumpers | 368,004 | [4] *265,444* | *13,779* | 88,781 |
| H. C. & R. gasoline plants | 185,745 | [4] *185,745* | | |
| Special nonaffiliated gas utilities | 217,853 | | | 217,853 |
| East Ohio Gas Company | 39,548,404 | | *5,135* | 39,545,269 |
| Peoples Natural Gas Co | 9,820,415 | | | 9,820,415 |
| River Gas Co | 395,090 | | | 395,090 |
| Fayette County Gas Co | 873,537 | | | 873,537 |
| Manufacturers Light & Heat Co | 2,260,513 | | | 2,260,513 |
| Total | [5] 64,482,594 | *21,798* | *95,169* | 64,365,627 |

### STATEMENT OF PEAK RESPONSIBILITY IN M. C. F. DAILY JAN. 18 1940

| | | | | |
|---|---|---|---|---|
| Domestic and commercial | 37,686 | [2] 1,507 | [6] | 39,193 |
| Industrial | 17,497 | [2] *700* | [6] | 18,197 |
| Total dom., com. and ind | 55,183 | [2] 2,207 | [6] | 57,390 |
| Drillers and pumpers | 844 | [4] *574* | [6] | 270 |
| H. C. & R. gasoline plants | 707 | [4] *707* | [6] | |
| Special nonaffiliated gas utilities | 1,255 | | [6] | 1,255 |
| East Ohio Gas Co | 173,656 | | [6] | 173,656 |
| Peoples Natural Gas Co | 55,341 | | [6] | 55,341 |
| River Gas Co | 4,790 | | [6] | 4,790 |
| Fayette County Gas Co | 4,916 | | [6] | 4,916 |
| Manufacturers Light & Heat Co | 11,024 | | [6] | 11,024 |
| Total | [5] 307,716 | 926 | | 308,642 |

[1] To eliminate incidental gas deliveries of former Reserve Gas Co. in conformity with Schedule No. 4 column (g) of Exhibit No. 78.

[2] Four percent for distribution system losses.

[3] In accordance with Exhibit No. 78 Examiners' Adjusting Entry No. 203.

[4] In accordance with Exhibit No. 78 Examiners' Adjusting Entry No. 213.

[5] Exclusive of Northwestern Ohio Natural Gas Co. and Ohio Fuel Gas Co.

[6] No adjustment necessary since peaks of former Reserve Gas Co. were not included in F. P. C. exhibit.

*Italic figures denote decrease.*

TABLE IV.—*Statement of 1940 annual and peak-day pumpage, M. C. F.*

| Customer | Annual volumes | | | | | Peak-day volumes | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1940 deliveries | Percent of sales pumped | Volume pumped | Number of pumpages | Pumpage | Peak-day deliveries | Percent pumped | Volume pumped | Number of pumpages | Pumpage |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| Domestic, commercial and industrial | 11,164,169 | 80 | 8,931,335 | 1 | 8,931,335 | 57,390 | 80 | 45,912 | 1 | 45,912 |
| Drillers and pumpers | 88,781 | | | | | 270 | | | | |
| Special nonaffiliate gas utilities | 217,853 | | | | | 1,255 | | | | |
| East Ohio Gas Company | 39,545,269 | 100 | 39,545,269 | 1¾ | 69,204,221 | 173,656 | 100 | 173,656 | 1¾ | 303,898 |
| Peoples Natural Gas Company | 9,820,415 | 100 | 9,820,415 | 1¼ | 12,275,519 | 55,341 | 100 | 55,341 | 1¾ | 92,419 |
| River Gas Company | 395,090 | 100 | 395,090 | 1 | 395,090 | 4,790 | 100 | 4,790 | 1 | 4,790 |
| Fayette County Gas Company | 873,537 | 100 | 873,537 | 1 | 873,537 | 4,916 | 100 | 4,916 | 1 | 4,916 |
| Manufacturers Light & Heat Company | 2,260,513 | 100 | 2,260,513 | 1 | 2,260,513 | 11,024 | 100 | 11,024 | 1 | 11,024 |
| Total | 64,365,627 | | 61,826,159 | 1½ | 92,940,215 | 308,642 | | 295,639 | 1¾ | 462,959 |

NOTE 1.—Data in columns (2) and (7) taken from table III.

NOTE 2.—Domestic, Commercial and Industrial includes distribution losses.

Pages 6 to 13 omitted.]

1 **EXHIBIT NO. 90. RATE OF RETURN EARNED ON ORIGINAL COST BASE, YEARS 1937 TO 1940, INCLUSIVE, F. P. C. WITNESS DUNN**

## WRITTEN STATEMENT

The attached schedules have been prepared to summarize the plant costs, reserves, and operating expenses for the four year period 1937 to 1940, inclusive, to show the profit earned and the rate of return on the original cost base. There are set forth certain rate adjustments proposed by the examiners which have not been made in the underlying exhibits, but are included here for the purpose of summarizing all costs expected to increase or decrease income in the future.

*Return Earned on Original Cost Base.*

Schedule No. 1 shows the average original cost base in the amount of $31,281,373. This amount includes production, transmission, distribution, and general plant with the related reserves for depreciation and depletion deducted and the allowance for working capital added.

Net Operating Revenues are shown in the amount of $4,125,399 as the annual average for the four-year period. The determination of net operating revenues, as adjusted, is shown by the income statements summarized on Schedule No. 1A. The expenses of the four-year period are expected to serve as a guide for future operating costs; therefore, certain nonrecurring expenses are not included in Schedule No. 1.

2 *Exploration and Development Costs.*

The actual costs and losses as set forth in accounts 510, 511, and 512 have been included as a deduction from net operating revenues for the four-year period. Due to cancellations of unoperated acreage delay rental cost is expected to be reduced in the future. However, the company is starting a program of exploratory deep drilling, and there is a known loss on the first of these deep wells of approximately $200,000.00 due to a well completed dry in 1941. For this reason it is believed proper to include the full amount of exploration and development costs as shown.

*Interest on Unoperated Acreage.*

Interest on unoperated acreage has been included as a deduction from net operating revenues. The investment has been classified as Gas Plant Held for Future Use which is not included in Gas Plant in Service. The examiners propose the allowance in operating expenses of interest as a carrying cost of the investment. A rate of 6% has been used pending the decision by the Commission as to a fair rate of interest.

The minor adjustment on Gas Plant Held for Future Use relates to adjusting entries 338 and 342, Exhibit No. 57A. Certain wells and field lines not used in prior years were placed in service in 1940.

It is proposed to amortize property reclassification and rate case expenditures over a period of ten years, being a period of six years in the future.

3 *Adjustment of Income Taxes.*

The income taxes actually paid were included in the taxes account. This adjustment removes the Federal Income Taxes pending the determination of a fair return by the Commission and the computation of the indicated taxes on income at the latest tax rate.

For Federal Income Tax purposes certain deductions and allowances are made which are not recorded on the books or set forth in the examiners' income statements. To illustrate a method for the Commission to use in estimating an allowance for future income taxes, giving effect to whatever reduction in revenues may be ordered by the Commission, the following tabulation is submitted:

| | 1937 | 1938 | 1939 | 1940 | Average |
|---|---|---|---|---|---|
| Income taxes paid | $282,315 | $17,515 | $191,524 | $912,313 | $350,916 |
| Income tax rate | 14.9386% | 16.5% | 16.5% | 24% | |
| Net taxable income | $1,889,830 | $106,150 | $1,160,733 | $3,801,304 | 1,739,504 |
| Assumed reduction (for illustration only) | | | | | 1,000,000 |
| Revised net taxable income | | | | | 739,504 |
| Tax rate in effect | | | | | .24 |
| Allowance for income tax (illustrative only) | | | | | 177,481 |

Schedule No. 1 shows the annual average return earned in the amount of $3,809,201 and the average rate of return earned on the original cost base as 12.18%.

4 *Return Earned on Original Cost Base, Exclusive of Distribution Plant, using Company Method.*

The company's method of determining return applicable to interstate sales avoids an allocation of costs to West Virginia domestic and industrial consumers. The rates to these consumers are subject to West Virginia regulation, and such sales amount to less than 20% of the total.

Company Exhibit No. 37 sets forth certain reasons why the method of crediting the revenue received from the local distribution of gas in West Virginia in excess of specific distribution costs to the production, transmission and general costs, should be adopted.

The return is worked out on the premise that the Company's local West Virginia business is unavoidable in carrying out its major business of exporting gas from West Virginia; and that these local sales being subject to West Virginia regulation, the remainder of the gross revenues therefrom after deducting specific distribution costs, is the full contribution of the West Virginia consumers towards the costs incurred jointly on account of all gas sold. The cost of the gas exported from the state is thus the Company's total production, transmission and general expenses after crediting this remainder of the revenue from local distribution of gas after deducting specific distribution costs.

Schedule No. 2 sets forth the plant costs, revenues, and operating costs which are taken from the other accounting exhibits. Schedule No. 2A shows the gas service revenues other than interstate sales and the specific costs which have been de-
5 ducted. Return is computed at an assumed 6% on net original cost of distribution plant, including an allowance for working capital.

Schedule No. 1 shows the annual average rate of return earned at 12.18% on the total base as compared with 12.53% on the interstate base, shown by Schedule No. 2. The difference in return earned and the rate is $104,535, representing the return on distribution plant included in Schedule No. 2.

EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

WASHINGTON, D. C., *June 2, 1941.*

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*

CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

484807—42——23

## HOPE NATURAL GAS COMPANY

### *Rate of Return Earned on Original Cost Base Years 1937 to 1940, Inclusive*

| | Year ended Dec. 31 | | | | 4-year average |
|---|---|---|---|---|---|
| | 1937 | 1938 | 1939 | 1940 | |
| Original cost of gas plant in service | Same as 1938 | $54,022,699 | $54,020,380 | $55,174,551 | $54,310,07 |
| Reserves for depreciation and depletion | | 24,807,523 | 25,423,364 | 26,076,378 | 25,278,67 |
| Net original cost | | 29,215,176 | 28,596,966 | 29,098,173 | 29,031,77 |
| Working capital | | 2,250,000 | 2,250,000 | 2,250,000 | 2,250,00 |
| Original cost base | 31,465,176 | 31,465,176 | 30,846,966 | 31,348,173 | 31,281,77 |
| Net operating revenues | 4,111,672 | 2,133,121 | 3,874,557 | 6,382,247 | 4,125,39 |
| *Examiners' rate adjustments* | | | | | |
| Exploration and development costs | 501,076 | 612,242 | 500,341 | 407,930 | 505,39 |
| 6% interest on unoperated acreage | 35,063 | 35,063 | 35,063 | 35,063 | 35,06 |
| Adjustment of gas plant held for future use | | | | 6,619 | 1,65 |
| Amortization of rate case expenses | 125,000 | 125,000 | 125,000 | 125,000 | 125,00 |
| Adjustment of income taxes | *282,315* | *17,515* | *191,521* | *912,913* | *350,56* |
| Return earned | 3,232,848 | 1,378,331 | 3,405,671 | 6,719,958 | 3,809,37 |
| Rate of return earned | 11.86% | 4.38% | 11.04% | 21.45% | 12.18% |

Italic figures denote decrease.

## HOPE NATURAL GAS COMPANY



*Comparative income statement for the years 1937 to 1940, inclusive, as adjusted, showing an average year for the period*

| Account No. | Account | As adjusted | | | | Average 1937-40 |
|---|---|---|---|---|---|---|
| | | 1937 | 1938 | 1939 | 1940 | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Gas service revenues* | | | | | |
| 600 | Residential sales | $1,761,310.66 | $1,663,638.55 | $1,500,945.52 | $1,738,754.23 | $1,799,174.80 |
| 602.1 | Commercial sales | | | 245,974.46 | 286,075.75 | |
| 602.2 | Industrial sales | 1,586,031.56 | 1,008,073.71 | 1,236,210.19 | 1,352,796.21 | 1,295,777.92 |
| 603 | Public street and highway lighting | 462.96 | 452.35 | 308.51 | 225.20 | 362.25 |
| 604 | Other sales to public authorities | 8,250.31 | 7,796.16 | 259.39 | 209.69 | 4,138.88 |
| 605.1 | Sales to affiliated utilities | 14,118,030.22 | 12,254,495.65 | 13,814,430.85 | 18,320,005.96 | 14,626,740.68 |
| 605.2 | Sales to nonaffiliated utilities | 1,703,524.80 | 1,531,177.01 | 1,061,208.85 | 987,682.89 | 1,320,898.38 |
| 608 | Other sales | 60,919.13 | 47,577.38 | 39,632.97 | 46,680.00 | 48,702.39 |
| | Total gas service revenues | 19,238,569.64 | 16,513,210.81 | 17,898,970.74 | 22,732,430.02 | 19,095,795.30 |
| | *Other gas revenues* | | | | | |
| 610 | Rent from gas property | 28,455.91 | 29,326.60 | 23,426.64 | 35,853.90 | 29,260.77 |
| 612 | Customers' forfeited discounts and penalties | 21,539.35 | 21,310.58 | 21,561.78 | 23,786.74 | 22,055.37 |
| 618 | Revenue from incidental oil sales | 6,051.18 | 2,836.00 | 6,847.58 | 8,280.48 | 6,003.88 |
| 619 | Miscellaneous gas revenues | 29,193.20 | 9,172.27 | 16,856.45 | 39,269.83 | 23,632.93 |
| | Total other gas revenues | 85,239.94 | 62,645.45 | 68,695.45 | 107,170.95 | 80,942.95 |
| | Total operating revenues | 19,323,809.58 | 16,575,856.26 | 17,967,666.19 | 22,839,600.97 | 19,176,738.25 |

## HOPE NATURAL GAS COMPANY—Continued

*Comparative income statement for the years 1937 to 1940, inclusive, as adjusted, showing an average year for the period*—Continued

| Account No. | Account | As adjusted | | | | Average 1937-40 |
|---|---|---|---|---|---|---|
| | | 1937 | 1938 | 1939 | 1940 | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| | *Operating revenue deductions* | | | | | |
| 733-749 | Natural gas production | $1,106,896.03 | $1,367,876.70 | $1,135,863.59 | $1,214,306.64 | $1,206,235.75 |
| 754-757 | Other production expenses | 8,160,523.92 | 7,671,132.50 | 7,630,871.08 | 8,493,753.37 | 7,989,070.22 |
| 758-764 | Transmission expenses | 1,697,806.20 | 1,603,808.63 | 1,432,855.53 | 1,761,018.71 | 1,623,872.27 |
| 765-777 | Distribution expenses | 525,715.29 | 505,252.04 | 434,987.02 | 466,633.17 | 483,146.88 |
| 779-784 | Customers' accounting and collection expenses | 101,459.07 | 111,535.84 | 158,275.48 | 154,819.96 | 131,522.58 |
| 785-788 | Sales promotion expenses | | | 5,891.75 | 6,088.80 | 2,995.13 |
| 790-809 | Administrative and general expenses | 913,999.20 | 886,828.30 | 808,908.00 | 839,506.18 | 862,310.42 |
| 503.1 | Depreciation | 1,346,944.66 | 1,262,391.35 | 1,214,640.95 | 1,423,863.16 | 1,311,960.04 |
| 503.2 | Amortization and depletion of P. N. G. L. and L. R | 40,703.86 | 31,407.84 | 36,772.47 | 57,084.00 | 41,492.04 |
| 504 | Amortization of other limited term C. I | | 813.44 | 6,369.47 | 5,996.02 | 3,294.73 |
| 507 | Taxes | 1,318,109.62 | 1,001,688.19 | 1,227,073.65 | 2,034,283.70 | 1,395,438.79 |
| | Total operating revenue deductions | 15,212,157.85 | 14,442,734.83 | 14,093,108.99 | 16,457,353.71 | 15,051,338.85 |
| | Net operating revenues | 4,111,671.73 | 2,133,121.43 | 3,874,557.20 | 6,382,247.26 | 4,125,399.40 |
| | Nonrecurring expenses | 45,285.56 | 51,120.43 | 69,256.90 | 89,659.60 | |
| | Utility income | 4,066,386.17 | 2,082,001.00 | 3,805,300.30 | 6,292,587.66 | 4,125,399.40 |
| | *Exploration and development costs* | | | | | |
| 510 | Delay rentals | 409,204.33 | 406,547.55 | 407,284.24 | 393,295.21 | 426,582.84 |
| 511 | Nonproductive well drilling | 27,743.54 | 86,461.77 | 47,869.17 | 32,152.42 | 48,563.22 |
| 512 | Abandoned leases | 4,127.36 | 50,232.68 | 45,464.20 | 12,472.43 | 30,249.31 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Total exploration and development costs | 501,075.83 | 612,262.00 | 480,543.61 | 407,920.06 | 605,366.37 |
| | Net utility income | 3,564,310.34 | 1,409,750.00 | 3,304,956.09 | 5,884,667.60 | 3,620,004.63 |
| 520-527 | Other income | 451,335.02 | 543,434.23 | 255,714.43 | 293,123.06 | 285,901.83 |
| | Gross income | 4,016,645.36 | 2,013,193.23 | 3,560,671.12 | 6,177,790.66 | 4,005,905.86 |
| 535-538 | Income deductions | 351,919.82 | 313,607.76 | 297,332.56 | 304,133.87 | 316,748.50 |
| | Net income transferred to surplus | 3,664,725.54 | 1,699,585.47 | 3,263,338.56 | 5,873,656.79 | 3,689,157.36 |

## Hope Natural Gas Company

*Rate of Return Earned on Original Cost Base, Exclusive of Distribution Plant, Using Company Method*

| Description | 1937 | 1938 | 1939 | 1940 | Average 1937–40 |
|---|---|---|---|---|---|
| (a) | (b) | (c) | (d) | (e) | |
| Original cost of gas plant in service, exclusive of distribution plant | Same as 1938 | $51,207,621 | $51,099,024 | $52,094,557 | $51,394,706 |
| Reserves for depreciation and depletion | | 25,501,356 | 24,072,167 | 24,683,271 | 25,939,538 |
| Net original cost | | 2,706,265 | 27,026,857 | 27,381,286 | 23,455,168 |
| Working capital | | 2,100,000 | 2,100,000 | 2,100,000 | 2,100,000 |
| Original cost base for interstate sales | $29,806,265 | 29,806,265 | 29,126,857 | 29,481,286 | 29,555,168 |
| *Operating revenues from interstate business.* | | | | | |
| The East Ohio Gas Company | 12,757,670 | 11,157,537 | 12,359,500 | 14,725,648 | 12,750,089 |
| The Peoples Natural Gas Company | 1,244,635 | 1,019,044 | 1,371,757 | 3,457,207 | 1,773,161 |
| The River Gas Company | 115,725 | 77,915 | 83,174 | 137,151 | 103,491 |
| Fayette County Gas Company | 267,531 | 263,909 | 264,725 | 270,618 | 266,710 |
| The Manufacturers Light & Heat Company | 1,425,050 | 1,258,602 | 787,738 | 706,131 | 1,044,380 |
| Total interstate revenues | 15,810,611 | 13,777,064 | 14,866,894 | 19,296,755 | 15,937,831 |
| *Operating revenue deductions, exclusive of specific distribution costs* | | | | | |
| Natural gas production | 1,106,806 | 1,367,877 | 1,135,864 | 1,214,307 | 1,206,236 |
| Other production expenses | 8,160,524 | 7,671,133 | 7,630,871 | 8,393,753 | 7,989,070 |
| Transmission expenses | 1,5937,806 | 1,663,809 | 1,432,856 | 1,761,019 | 1,623,872 |
| Administrative and general expenses | 913,999 | 886,828 | 808,508 | 839,500 | 862,311 |
| Depreciation | 1,346,985 | 1,262,391 | 1,214,641 | 1,423,863 | 1,311,960 |
| Amortization and depletion of P. N. G. L. & L. R. | 40,703 | 41,408 | 36,772 | 57,084 | 41,492 |

| | | | | | |
|---|---|---|---|---|---|
| Amortization of other limited-term U. I | | 813 | 6,360 | 5,908 | 3,295 |
| Taxes | 1,318,110 | 1,001,688 | 1,227,674 | 2,034,284 | 1,395,439 |
| Total | 14,584,984 | 13,825,947 | 13,493,955 | 15,829,812 | 14,443,675 |
| *Examiners' rate adjustments* | | | | | |
| 6% interest on unoperated acreage | 35,063 | 35,063 | 35,063 | 35,063 | 35,063 |
| Exploration and development costs | 501,076 | 612,242 | 500,344 | 407,920 | 505,395 |
| Amortization of property reclassification and river rate expenditures | 125,000 | 125,000 | 125,000 | 125,000 | 125,000 |
| Other revenue | *85,260* | *62,645* | *68,695* | *107,171* | *80,943* |
| Adjustment of Federal income taxes | *282,315* | *17,515* | *191,521* | *912,313* | *350,916* |
| Adjustment of gas plant held for future use | | | | 6,619 | 1,655 |
| Revenue from West Virginia sales | *2,697,586* | *2,019,825* | *2,329,716* | *2,696,120* | *2,435,764* |
| Total examiner's rate adjustments | *2,405,832* | *1,327,680* | *1,929,525* | *3,141,002* | *2,200,510* |
| Net Operating Income from Interstate Sales | 3,020,459 | 1,278,797 | 3,302,464 | 6,007,945 | 3,704,666 |
| Rate of return earned | 12.18% | 4.29% | 11.34% | 22.41% | 12.53% |

Italic figures denote decrease.

Schedule 2 A

## HOPE NATURAL GAS COMPANY

*Summary of Specific Distribution Costs*

| | 1937 | 1938 | 1939 | 1940 | Average 1937-40 |
|---|---|---|---|---|---|
| ***Distribution adjustments*** | | | | | |
| Accounts 600-608 gas service revenues | $19,238,570 | $16,513,211 | $17,898,971 | $22,732,430 | $19,095,795 |
| Operating revenues from export sale of gas | 15,810,611 | 13,777,064 | 14,866,894 | 19,296,755 | 15,937,831 |
| Revenues from sales of gas in West Virginia | 3,427,959 | 2,736,147 | 3,032,077 | 3,435,675 | 3,157,964 |
| Distribution expenses | 445,159 | 422,985 | 352,987 | 377,288 | 399,605 |
| Customers accounting and collecting expenses | 101,459 | 111,536 | 158,275 | 154,820 | 131,522 |
| Sales promotion expenses | | | 5,892 | 6,089 | 2,995 |
| Depreciation | 80,556 | 82,268 | 82,000 | 89,345 | 83,542 |
| Return—6% on net distribution investment [1] | 103,388 | 99,534 | 103,207 | 112,013 | 104,536 |
| Total cost of distributing gas in West Virginia | 730,562 | 716,323 | 702,361 | 739,555 | 722,200 |
| Balance available for credit to production, transmission, and general expenses | 2,697,397 | 2,019,824 | 2,329,716 | 2,696,120 | 2,435,764 |

[1] Computed as follows:

| Date | Original cost | Accumulated depreciation | Net cost | Working capital [2] | Base | Return at 6% |
|---|---|---|---|---|---|---|
| 12/31/37 | $2,815,078 | $1,241,943 | $1,573,135 | $150,000 | $1,723,135 | $103,388 |
| 12/31/38 | 2,815,078 | 1,306,167 | 1,508,911 | 150,000 | 1,658,911 | 99,534 |
| 12/31/39 | 2,921,306 | 1,351,197 | 1,570,109 | 150,000 | 1,720,109 | 103,207 |
| 12/31/40 | 3,109,994 | 1,393,107 | 1,716,887 | 150,000 | 1,866,887 | 112,013 |

| | | | |
|---|---|---|---|
| [1] See the following table. | | | |
| Distribution materials and supplies | | | $75,000 |
| Distribution expense | | $647,665 | |
| Less: | | | |
| Depreciation | $83,542 | | |
| Taxes | 139,081 | 222,623 | |
| | | 395,042 | |
| Allocation of general | | 121,796 | |
| 12½% of | | 516,838 | 64,605 |
| Working capital—Distribution system | | | 139,605 |

## HOPE NATURAL GAS COMPANY

*Summary of Gas Service Revenues*



| Account No. | Account | 1937 | | 1938 | | 1939 | | 1940 | | Average | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MCF | Amount | MCF | Amount | MCF | Amount | MCF | Amount | MCF | Amount |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) |
| 600 | Residential sales | 4,681,117 | $1,761,311 | 4,415,634 | $1,663,050 | 3,991,037 | $1,500,946 | 4,637,223 | $1,738,754 | 4,785,426 | $1,799,175 |
| 602 1 | Commercial sales | | | | | 653,024 | 245,974 | 763,666 | 288,076 | | |
| 602 2 | Industrial sales | 6,299,778 | 1,586,032 | 3,894,636 | 1,008,074 | 4,825,474 | 1,236,210 | 5,332,676 | 1,352,796 | 5,088,191 | 1,295,778 |
| 603 | Public street and highway lighting | 1,191 | 463 | 1,169 | 452 | 794 | 309 | 584 | 225 | 934 | 362 |
| 604 | Sales to other public authorities | 24,358 | 8,290 | 22,658 | 7,706 | 778 | 259 | 629 | 210 | 12,455 | 4,139 |
| | Total distribution | 11,006,444 | 3,356,096 | 8,334,267 | 2,679,961 | 9,471,107 | 2,983,698 | 10,734,778 | 3,378,061 | 9,886,656 | 3,099,454 |
| 605 1 | Sales to other gas utilities (affiliated) | 38,914,073 | 14,118,039 | 33,409,933 | 12,254,496 | 38,009,416 | 13,814,431 | 50,503,453 | 18,320,006 | 40,208,469 | 14,626,741 |
| 605 2 | Sales to other gas utilities (nonaffiliated) | 5,373,272 | 1,692,587 | 4,833,549 | 1,522,568 | 3,341,153 | 1,052,463 | 3,100,700 | 976,749 | 4,162,191 | 1,311,090 |
| | Total interstate | 44,284,345 | 15,810,611 | 38,243,482 | 13,777,064 | 41,350,569 | 14,866,894 | 53,604,243 | 19,296,755 | 44,370,660 | 15,937,831 |
| 607 2 | Sales to other gas utilities (nonaffiliated) | 71,882 | 10,944 | 55,446 | 8,609 | 53,058 | 8,736 | 55,726 | 10,934 | 59,028 | 9,808 |
| 608 | Other sales | 335,740 | 60,919 | 235,608 | 47,577 | 194,139 | 39,633 | 247,485 | 46,680 | 253,243 | 48,702 |
| | Total miscellaneous | 407,622 | 71,863 | 291,054 | 56,186 | 247,197 | 48,369 | 303,211 | 57,614 | 312,271 | 58,510 |
| | Total | 55,698,411 | 19,238,570 | 46,868,803 | 16,513,211 | 51,068,873 | 17,898,971 | 64,642,232 | 22,732,430 | 54,569,587 | 19,095,795 |

1 **EXHIBIT NO. 92.—COMPARATIVE INCOME STATEMENT FOR THE THREE MONTHS ENDED MARCH 31, 1941, AND 1940. F. P. C. WITNESS DUNN**

## WRITTEN STATEMENT

The attached income statement with data on operating revenues has been prepared from records of Hope Natural Gas Company without adjustment. It is presented for comparative purposes to show the results of operations for the latest period available.

The income data for the first three months of 1941 have been compared with those for the first three months of 1940. It is the opinion of the examiner that this comparison, which is made for the purpose of showing the general upward trend of the company's business, is proper for that purpose because there have been no major changes in the sales contracts and plant accounts. A change affecting operations that has been made in 1941 is the installation by The East Ohio Gas Company of a liquefaction plant at Cleveland. This plant can be filled to capacity during a period of low demand and emptied of its contents as need arises. It is reported that the experiment is successful and hence of benefit both to consumers and companies.

The attached statements include the revenues and expenses arising from the properties of the merged Reserve Gas Company. The operating results and properties of that company, by stipulation of counsel, have been excluded from
2 the present investigation of Hope Natural Gas Company. For comparative purposes it is not deemed necessary to make the detailed study required to segregate the former Reserve Gas Company operating results, for the reason that such expenses and revenues are about the same for each period. This is further brought out in Schedule No. 2 which shows the following facts concerning sales to The Northwestern Ohio Natural Gas Company, the customer supplied by the former Reserve Gas Company:

| | M. c. f. | Amount |
|---|---|---|
| Three months: | | |
| 1941 | 1,361,842 | $691,552.60 |
| 1940 | 1,351,702 | 640,410.60 |

The comparative income statement discloses the continuing upward trend of sales and profits. Operating revenues are up $1,114,562.24 for the three-month period of 1941 over the corresponding period of 1940. Utility operating income is also higher by the amount of $591,777.50 or approximately $200,000.00 per month.

It is not intended that the attached schedules be used for purposes other than to indicate the trend of operations.

EDWARD L. DUNN,
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

WASHINGTON, D. C., *June 16, 1941.*

Approved:
W. E. BAKER,
W. E. Baker,
CHIEF ACCOUNTANT.
CHAS. W. SMITH,
*Chief, Bureau of Accounts, Finance and Rates.*

3 Docket G-113

## HOPE NATURAL GAS COMPANY

*Comparative Income Statement for the 3 Months Ended Mar. 31, 1941 and 1940*

[Prepared from company's financial statements]

| Account Number | Particulars | 3 months ended Mar. 31 | |
|---|---|---|---|
| | | 1941 | 1940 |
| | 1—Utility operating income | | |
| 501 | Operating revenues | $9,174,808.95 | $8,089,246.71 |
| | *Operating revenue deductions* | | |
| | 2—Operating expenses: | | |
| 502 | Gas purchased | 2,860,172.08 | 2,426,452.04 |
| | Other | 1,631,755.46 | 1,671,404.82 |
| | Total operating expenses | 4,491,927.54 | 4,097,856.86 |
| 503.1 | Depreciation | 390,000.00 | 337,000.00 |
| 503.2 | Amortization and depletion of productive gas land and land rights | 6,300.00 | 6,300.00 |
| 504 | Amortization of other limited term utility investment | 1,881.83 | 1,879.11 |
| 507 | Taxes | 606,843.99 | 473,715.77 |
| 510 | Delay rentals | 99,160.68 | 133,072.47 |
| 511 | Nonproductive well drilling | 2,454.91 | |
| | Total operating revenue deductions | 5,508,568.95 | 5,045,784.21 |
| | Utility operating income | 3,666,240.00 | 3,043,462.50 |
| | 3—Other income: | | |
| 520 | Income from merchandising, jobbing, and contract work | 122.85 | 245.69 |
| 521 | Income from nonutility operations | *14.79* | 11.63 |
| 522 | Revenue from lease of other physical property | 408.00 | 328.00 |
| 523 | Dividend revenues | 26.00 | 30.00 |
| 524 | Interest revenues | 86,046.65 | 49,841.91 |
| 525 | Miscellaneous nonoperating revenues | 250.24 | 140.45 |
| 527 | Nonoperating revenue deductions | *5.94* | 7.69 |
| | Total other income | 86,832.58 | 50,590.09 |
| | Gross income | 3,693,082.58 | 3,093,058.59 |
| | 4—Income deductions: | | |
| 533 | Other interest charges | 1,693.37 | 1,516.81 |
| 537 | Miscellaneous amortization | 1,185.18 | 1,185.18 |
| 538 | Miscellaneous income deductions | 1,718.37 | 1,675.07 |
| | Total income deductions | 4,596.92 | 4,377.06 |
| | Net income | 3,688,485.66 | 3,089,681.53 |
| | 5—Disposition of net income: | | |
| | Balance transferred to earned surplus | 3,688,485.66 | 3,089,681.53 |

(1) Error in statement—foots to $50,611.36—difference not known.

Italic figures denote decrease.

Docket G-113

## HOPE NATURAL GAS COMPANY

### *Comparative Statement of Operating Revenues—Account 501, for the 3 Months Ended Mar. 31, 1941 and 1940*

(Prepared from company's financial statements)

| Account number | Particulars | 3 months ended Mar. 31 | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1941 | | | 1940 | | |
| | | M. C. F. | Rate | Amount | M. C. F. | Rate | Amount |
| | Gas sales: | | | | | | |
| 600 | Residential | 1,917,853 | $0.2691 | $707,863.59 | 2,098,801 | $0.3684 | $773,294.84 |
| 602.1 | Commercial | 312,644 | .3694 | 115,495.06 | 349,779 | .3686 | 128,916.01 |
| 602.2 | Industrial | 1,599,648 | .2496 | 399,222.03 | 1,406,582 | .2545 | 357,921.55 |
| 603 | Street and highway lighting | 133 | .3920 | 52.14 | 147 | .3857 | 56.70 |
| 604 | Other sales to public authorities | 129 | .3322 | 42.99 | 336 | .3334 | 112.01 |
| 605.1 | Affiliated utilities | 19,038,949 | .3720 | 7,082,471.84 | 15,742,759 | .3723 | 5,861,371.09 |
| 605.2 | Nonaffiliated utilities | 2,503,036 | .3024 | 756,934.62 | 2,611,681 | .3066 | 800,726.39 |
| 608 | Other sales | 94,623 | .2786 | 26,360.76 | 158,618 | .2197 | 34,847.32 |
| | Total sales | 25,466,995 | .3569 | 9,088,443.03 | 22,368,703 | .3557 | 7,957,246.51 |
| | Other gas revenues: | | | | | | |
| 610 | Rent from gas property | | | 7,361.13 | | | 7,076.24 |
| 612 | Customer's forfeited discounts and penalties | | | 7,949.49 | | | 9,042.68 |
| 617.1 | Revenue from processing natural gas (contract gas) | | | 21,289.78 | | | 20,127.61 |
| 617.2 | Revenue from processing natural gas—Butane | | | 8,750.68 | | | 6,963.39 |
| 618 | Revenue from incidental oil sales | | | 2,153.89 | | | 2,425.60 |
| 619 | Miscellaneous gas revenues: | | | | | | |
| 619.1 | Warehouse sales | | | 5,908.98 | | | 1,495.37 |
| 619.2 | Unclaimed security deposits | | | *10.39* | | | *2.74* |
| 619.3 | Management fees and expenses | | | 30,035.71 | | | 35,668.04 |
| 619.4 | Unclaimed checks | | | 7.75 | | | *1.48* |
| 619.5 | Shop labor field | | | 64.94 | | | 43.75 |
| 619.6 | Gas sales contract adjustment | | | | | | 17,109.78 |
| 619.9 | Other | | | 2,869.96 | | | *2,959.46* |
| | Total other gas revenue | | | 86,365.92 | | | 107,040.20 |
| | Total operating revenue | | | 9,174,808.95 | | | 8,069,286.71 |
| 605.1 | Sales to affiliated natural gas utilities: | | | | | | |
| | The East Ohio Gas Company | 10,628,809 | .3850 | 4,092,091.47 | 9,763,410 | .3850 | 3,758,912.86 |
| | Do | 3,193,198 | .3100 | 989,891.38 | 2,531,912 | .3100 | 784,892.72 |
| | Total | 13,822,007 | .3677 | 5,081,982.85 | 12,295,322 | .3698 | 4,543,805.58 |
| | The Peoples Natural Gas Company | 4,987,408 | .2850 | 1,920,152.09 | 3,170,376 | .3850 | 1,220,594.76 |
| | The River Gas Company | 229,534 | .3500 | 80,336.90 | 277,061 | .3500 | 96,971.35 |
| | Total—as above | 19,038,949 | .3720 | 7,082,471.84 | 15,742,759 | .3723 | 5,861,371.69 |

**Italic figures denote decrease.**

*Comparative Statement of Operating Revenues—Account 501, for the 3 Months Ended Mar. 31, 1941 and 1940*—Continued

| Account number | Particulars | 3 months ended Mar. 31 | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1941 | | | 1940 | | |
| | | M. C. F. | Rate | Amount | M. C. F. | Rate | Amount |
| 66.2 | Sales to nonaffiliated natural gas utilities: | | | | | | |
| | Fayette County Gas Company | 374,236 | $0.3150 | $117,884.35 | 213,771 | $0.3150 | $98,837.87 |
| | Manufacturers Light and Heat | 748,469 | .3150 | 235,767.74 | 939,827 | .2150 | 296,045.51 |
| | The Northwestern Ohio Natural Gas Company | 1,301,842 | .3000 | 390,552.60 | 1,334,702 | .3000 | 400,410.60 |
| | Total—as above | 2,424,547 | .53069 | 744,204.69 | 2,588,300 | .3073 | 795,293.98 |

1 **EXHIBIT NO. 107—STATEMENT SHOWING INCREASES IN PAY ROLL DURING YEARS 1940 AND 1941 NOT REFLECTED IN OPERATING EXPENSES, HOPE WITNESS CHISLER**

| Date effective | Monthly increase | | | Amount not reflected in operating expenses during year 1940 | |
|---|---|---|---|---|---|
| | Salaried employees | Wage earners | Total | | |
| 1940 | | | | | |
| Mar. 1 | $220.00 | | $220.00 | 2 months | $440.00 |
| June 1 | 205.00 | | 205.00 | 5 months | 1,025.00 |
| Sept. 1 | 340.00 | | 340.00 | 8 months | 2,720.00 |
| Oct. 1 | 25.00 | | 25.00 | 9 months | 225.00 |
| Nov. 1 | 630.00 | $5,232.91 | 5,862.91 | 10 months | 58,629.10 |
| Dec. 1 | 295.00 | | 295.00 | 11 months | 3,245.00 |
| 1941 | | | | | |
| Mar. 1 | 360.00 | | 360.00 | 12 months | 4,320.00 |
| June 1 | 4,272.50 | 8,563.41 | 12,835.91 | 12 months | 154,030.92 |
| Total amount not reflected in operating expenses | | | | | 224,635.02 |
| Less: Amount applicable to capital construction | | | | | 22,463.50 |
| Amount applicable to production, transmission, and general expenses | | | | | 202,171.52 |

## EXHIBIT NO. 111.—PROPERTY RECLASSIFICATION AND F. P. C. RATE INVESTIGATION EXPENSE, HOPE WITNESS CHISLER

| Year | Account No. 801—Property reclassification expense | Account No. 707—Regulatory commission expense (F. P. C. rate investigation) | Total |
|---|---|---|---|
| 1938 (F. P. C. Ex. 62-A, page 32) | $52,151.00 | $1,532.57 | $53,683.57 |
| 1939 (F. P. C. Ex. 62-A, page 32) | 228,054.26 | 315,066.86 | 543,121.12 |
| 1940 (F. P. C. Ex. 78, page 40) | 282,093.05 | 341,978.25 | 624,041.30 |
| 1941 (first 4 months) | 49,161.27 | 32,891.45 | 82,052.72 |
| Actual expenditures to Apr. 30, 1941 | 611,429.58 | 691,469.13 | 1,302,898.71 |
| To completion—Estimate | 63,570.42 | | 63,570.42 |
| To completion of hearings before F. P. C.—estimate | | 133,530.87 | 133,530.87 |
| Total cost | 675,000.00 | 825,000.00 | 1,500,000.00 |



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1 **EXHIBIT NO. 66.—DETERMINATION OF COMPOSITE SERVICE LIVES OF GASOLINE AND BUTANE PROPERTY OF THE HOPE CONSTRUCTION AND REFINING COMPANY, F. P. C. WITNESS SOYSTER**

[Pages i–iv omitted]

## WRITTEN STATEMENT

### PURPOSE

The purpose of this work is to determine the annual rates of accrual for the depreciation, and the composite service lives, of the properties used by Hope Construction and Refining Company in the manufacture and marketing of gasoline, butane, and other byproducts derived from natural gas.

### SCOPE

The properties under consideration, and for which service lives and annual rates have been determined, are only those in the state of West Virginia, which are carried on the books of the Hope Construction and Refining Company as gasoline investment and butane investment.

The Commission's accounting study of these properties has taken into consideration only the recent history of operations of these properties, namely for 1937, 1938, and 1939 (the last three years for which the records of the Company were complete). In this study of service lives there have likewise been taken into consideration only properties which have been carried on the books of the Company during the same three years. All plants included, with the exception of Littleton, have been used exclusively to process gas of the Hope Natural Gas Company.

2 ### GENERAL STATEMENT

For definitions of the terms used in this study, reference is made to an exhibit introduced in these proceedings by another member of the engineering staff of the Commission, which is entitled "Determination of Composite Service Lives of the Hope Natural Gas Company Property by Primary Accounts.".

The first commercial installation in the United States, of facilities for the extraction of gasoline and other hydrocarbons from natural gas by the oil absorption process was at the Hastings gasoline plant. The Company has only one plant at which butane and other liquefied petroleum gases are made. It is located adjacent to the Hastings gasoline plant, and is practically inseparable from it. These two plants and the five other gasoline plants in the first list given below, were the only plants found to be operating when I made the inspection during the latter half of January 1941.

All West Virginia plants under consideration in this study which were in operation prior to 1920, were built by Hope Natural Gas Company and were operated by that company until transferred in that year to Hope Construction and Refining Company. The respective dates of construction, daily capacity, and operating status are as follows:

| Name of plant | Original construction | Present capacity, gal. day | Status of property as of Dec. 31, 1939 |
|---|---|---|---|
| Hastings gasoline | 1914 | 40,000 | Operating. |
| Hastings butane | 1918 | 20,000 | Do. |
| Waverly gasoline | 1915 | 5,000 | Do. |
| Kennedy gasoline | 1917 | 20,000 | Do. |
| Bristol gasoline | 1918 | 8,000 | Do. |
| Goff gasoline | 1919 | 2,500 | Do. |
| Cornwell gasoline | 1926 | 12,000 | Shut down temporarily.[2] |

[1] Purchased from Reserve Gas Co., Dec. 31, 1938.
[2] Resumed operations October 1940.

Other West Virginia gasoline property on the Company's books as of December 31, 1939, is as follows:

| Name of plant | Original construction | Purchased | Shut down | Status of property as of Dec. 31, 1939 |
|---|---|---|---|---|
| Wright gasoline | 1916 | | 1935 | Boiler plant in use, gaso. plant dismantled. |
| Ellenboro gasoline | 1916 | | 1931 | Partly dismantled. |
| Salem gasoline | 1922 | [1] 1929 | 1939 | Do. |
| Littleton gasoline | 1924 | | 1932 | Retired in 1937. |
| Evans gasoline | 1926 | | 1931 | Dismantled. |
| Other property: | | | | |
| General investment | 1916 | | | In use. |
| Anshutz loading station | | [2] 1926 | | Do. |
| Perrine loading station | | [2] 1926 | | Dismantled. |

[1] Purchased from Godfrey L. Cabot, Inc.
[2] Purchased from Carter Oil Company.

4 All gathering and compressing of gas delivered to the gasoline plants is done by the Hope Natural Gas Co. The Hope Construction and Refining Company's gasoline and butane activities are limited to the extraction and marketing of these products. The gasoline plants, with the one exception of the Waverly plant, are built on sites adjacent to compressor stations of the Hope Natural Gas Co.

At Hastings and Cornwell, steam for gasoline plant use is received from gas-fired boilers of the Hope Natural Gas Co.

Due to the location of the plants involved in these determinations, and the fact that they treat gas from many production sources, it has not been practicable to relate the service life of any of the properties to a particular gas field or known source of supply.

Consequently the service lives and annual rates of accrual for depreciation have been more particularly related to the necessity for these gasoline extraction facilities in relation to the property of the Hope Natural Gas Co.

5 METHOD

At the beginning of these investigations a survey was made in the field covering all the principal extraction plants and other gasoline and butane properties of the Hope Construction and Refining Company, located in the State of West Virginia.

In the process of the survey, notes were made of the apparent age of the properties, the condition of maintenance, comparative working conditions and service requirements. Operating data were noted showing temperatures, pressures, rates of flow, quantity of gas handled, and products extracted. Operating conditions were discussed with those responsible for the operation and maintenance of the property, and information was secured relative to the adequacy of the facilities in use.

Opportunity was afforded, during the process of the survey, to inspect and study the Brave gasoline plant, situated at the site of the Brave Compressor Station of the Peoples Natural Gas Company on the Pennsylvania side of the West Virginia-Pennsylvania State line. This plant, originally constructed in 1915, is owned and operated by the Hope Construction and Refining Company, and is under the same general supervision as the plants in West
6 Virginia. It has a present daily capacity of 20,000 gallons of gasoline. In 1940, sixty percent of the gas treated by this plant came through lines of the Hope Natural Gas Company in the State of West Virginia. Except for the inclusion of a more

recent type of absorption equipment, the Brave plant is similar in character of construction and operation to the other plants of this Company involved in this discussion. The data on this plant serve as valuable support in the determination of service lives of the plants in West Virginia, although not used in the determination. For this reason this investigation was extended to include the Brave gasoline plant.

An analysis was made of the plant and investment of each of the several plants. The items of property were segregated into approximately forty separate groups or retirement units. Each group of property such as absorbers, boilers, rectifiers, tanks, etc., is composed of similar units and is set up with the related book costs. Due consideration was given to the net salvage value. An average service life with corresponding straight-line rate of accrual was determined for each of these groups of property at each plant.

7 In arriving at a composite service life and rate applicable to all plants, a composite life and rate was first determined for each plant and loading station which has been carried on the books of the Company during the past three years. From these the composite service life and rate of accrual was determined for all plants.

The Kennedy plant was considered individually, for the reason that it was owned and operated from 1917 to the end of 1938 by another company.

The average service lives of a number of classes of property in the several plants have been established with reasonable accuracy. For certain other classes of equipment, however, such as absorbers, rectifiers, stills, and fractionators, obsolescence, rather than physical deterioration, is the most important factor in the determination of service life.

Obsolescence in these plants is forcefully indicated by the high rate of steam consumption when compared with gasoline production. At Hastings and Cornwell plants, where the steam used is measured, the consumption is shown to be more than double that of more efficient plants for which data are available.

In order to determine the service lives of facilities which have been in use for some time it is necessary to estimate only the 8 remaining life expectancy. This is the measure of the time from the date of consideration until it is unprofitable to continue the property longer in service. Improvements in the art of gasoline extraction have produced plants of greatly reduced in-

stalled cost as well as operating costs and at the same time much improved extraction efficiencies. Careful consideration of these facts has been applied in these determinations.

CONCLUSION

After taking into consideration all relevant factors, both functional and physical, the composite service life of all of the gasoline and butane properties of the Hope Construction and Refining Company in the State of West Virginia (with the exception of the Kennedy plant), was determined to be 20.9 years. The corresponding annual straight-line rate is 4.79 percent. The composite service life for the Kennedy gasoline plant was determined to be 24.0 years, and its corresponding annual straight-line rate, 4.16 percent.

On the following page of this exhibit is shown a tabulation of data for individual plants. These data are the basis for the composite figures above quoted.

(Signed) CHAS. J. SOYSTER.
Chas. J. Soyster.
*Associate Engineer.*

Date April 5, 1941, Washington, D. C.

9

SUMMARY BY PLANTS

Tabulation of Composite Service Lives and Rates of Depreciation Accrual Determined for Gasoline and Butane Property in the State of West Virginia of the Hope Construction and Refining Company:

| Property | Adjusted book cost as of Dec. 31, 1939 | Composite service life (years) | Annual straight-line rate (%) |
|---|---|---|---|
| Hastings gasoline | $990,808.99 | 23 | 4.35 |
| Butane investment | 261,663.62 | 25 | 3.98 |
| Waverly gasoline | 171,297.29 | 23 | 4.39 |
| Cornwell gasoline | 185,026.10 | 27 | 3.63 |
| Bristol gasoline | 163,581.60 | 23 | 4.33 |
| Golf gasoline | 106,030.86 | 21 | 4.82 |
| Wright gasoline | 112,720.53 | 21 | 4.73 |
| Littleton gasoline | 196,342.58 | 11 | 8.80 |
| Salem gasoline | 22,706.50 | 16 | 6.48 |
| Evans gasoline | 16,384.99 | 10 | 9.72 |
| Ellenboro gasoline | 10,003.92 | 18 | 5.56 |
| Anshutz loading station | 23,142.39 | 24 | 4.19 |
| Perrine loading station | 44,973.63 | 23 | 4.41 |
| General investment | 20,105.00 | 21 | 4.79 |
| Total | 2,024,837.00 | 20.9 | 4.75 |
| Kennedy gasoline | 170,726.82 | 24 | 4.16 |
| Total West Virginia gasoline and butane | 2,195,563.82 | | |

[1] When retired in 1937.

1 **EXHIBIT NO. 63.—REVENUE, EXPENSES, AND NET INVESTMENT OF HOPE CONSTRUCTION AND REFINING COMPANY PERTAINING TO GASOLINE EXTRACTION CONTRACT WITH HOPE NATURAL GAS COMPANY, THREE YEARS ENDED DECEMBER 31, 1939, F. P. C. WITNESS BLEASE**

## WRITTEN STATEMENT

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Construction and Refining Company has been made, and, as a result, this report on the earnings and investment of the gasoline department is submitted.

*Purpose of this Exhibit.*

By contract dated June 30, 1920 (retroactive to January 1, 1920) Hope Construction and Refining Company agreed to process the natural gas of Hope Natural Gas Company passing through the pipe lines at the gasoline plants, and to extract therefrom gasoline and other products on a royalty basis. This contract specified that Hope Natural Gas Company was to receive one-fourth (1/4) of the gasoline and other products extracted, but was to bear one-fourth (1/4) of transportation costs to market.

Other provisions in this contract specified that all natural gas passing through the pipe lines at the gasoline plants was to be processed and returned without diminution in pressure, volume,
2 and heating value, and that Hope Natural Gas Company was to furnish free water, steam, and electrical current, except at plants already equipped with their own supply.

A supplementary contract dated August 1, 1923, revised the royalty to be received by Hope Natural Gas Company to one-eighth (1/8) of the gasoline and other products extracted, but with other provisions to remain the same.

This one-eighth royalty has continued to date and is being currently booked.

Hope Natural Gas Company Exhibit No. 37, Rate Statement, by George I. Rhodes, page 7, states "Such a low royalty is not appropriate in the eastern territory where prices received for gasoline and for field sales of gas are higher than in the midwest and accordingly in this exhibit the gasoline and butane royalties have been increased to the original fraction of 1/4 of the gross. This is a fair royalty."

Hope Natural Gas Company and Hope Construction and Refining Company are admittedly affiliated companies.

There are presented herein details of Hope Construction and Refining Company's investment in plant, for gasoline and other product extraction, devoted to processing Hope Natural Gas Company gas, and the earnings from these plants, in order to give the Commission factual data for determination of the proper credit to Hope Natural Gas Company for gasoline and other products extracted from its gas.

3 *Scope of this Exhibit.*

Hope Construction and Refining Company owns and operates oil and gas wells, lines, and appurtenant facilities in addition to its gasoline extraction plants. Also in addition to the gasoline and butane extraction plants in West Virginia devoted exclusively to processing gas of Hope Natural Gas Company. Hope Construction and Refining Company owns and operates gasoline plants in Pennsylvania and Ohio. These plants are known as the Brave, Imperial, and Jennings Guffey in Pennsylvania, and the Ludlow in Ohio. Of these, only the Brave plant in Pennsylvania processes gas originating from Hope Natural Gas Company's wells in West Virginia.

This exhibit has been confined principally to Hope Construction and Refining Company's investment in and earnings from its West Virginia gasoline and butane operations.

*A—Revenues and Expenses—All Departments.*

In addition to the gasoline extraction contract mentioned above, there exists a contract known as the "Service Agreement" between Hope Natural Gas Company and Hope Construction and Refining Company. The agreement was dated June 30, 1937 (renewed March 1, 1940). In this agreement Hope Natural Gas Company proposes to furnish at cost: (1) General administrative services, (2) general supervisory services, (3) general accounting services, (4) general engineering, (5) telephone and telegraph service, (6) annuities and benefits department services, (7) deple-

tion department services, (8) depreciation department services, (9) medical and health services, and (10) stationery department services. The bases for allocation of these services appear reasonable and the Examiners have taken no exception to either the amounts or methods of allocation.

Schedule No. A-1, "Earnings Statement, per Books," years 1937, 1938, and 1939, presents a condensed earnings statement of all departments of Hope Construction and Refining Company; oil, gasoline, butane, and gas. This statement was taken from the books of the company and has not been adjusted. The revenues, operating expenses, depreciation and depletion, taxes, and net operating revenues for each department are shown. It is of interest to note that the oil department shows a loss for the years 1938 and 1939, and that the gas department shows a loss for 1937, 1938, and 1939, while the gasoline and butane departments provide a profit for each year shown.

*Gasoline Department Earnings—All States.*

Schedule No. A-2, "Gasoline Department Earnings Statement, per Books," presents a condensed earnings statement of the gasoline department, and includes operations of all plants. This statement was taken from the books of the company and has not been adjusted. It shows for the years 1937, 1938, and 1939 the gasoline sales by gallons and dollars, a condensed summary of the gasoline expenses, and the net earnings of the gasoline department, which is in agreement with the gasoline department net earnings shown on Schedule No. A-1.

Schedule No. A-2a, "Revenue from Gasoline Sales by Plants," years 1937, 1938, and 1939, supports and is in agreement with the "Sales" shown on Schedule No. A-2. Schedule No. A-2a shows the gasoline sales for the three years, divided between states and plants, showing also the revenue received from purchased gasoline. This statement was taken from the books and records of the company and is unadjusted.

Schedule No. A-2b, "Gasoline Department Expenses," years 1937, 1938, and 1939, supports and is in agreement with the "Total Expenses" shown on schedule No. A-2. This statement was prepared from the books and records of the company in such detail as the accounts were kept. It will be noted that the primary purpose is to determine the cost of gasoline manufactured and the cost of gasoline sold, while there has been no segregation between operating and maintenance expenses.

*Earnings Statement—Adjusting Entries.*

Adjusting entries have been made for the West Virginia gasoline department earnings and for the butane department earnings.

Entry No. 1 reverses the royalty paid to Hope Natural Gas Company for the years 1937, 1938, and 1939, and to Reserve Gas Company for 1939. This royalty has been computed at 1/8 of the net sales and charged to gasoline and butane expense under account "Contract Gas." This reversal has been made in order to arrive at an earnings base on which a royalty or other credit may be computed.

6 Entry No. 2 reverses the charge for vent gas returned to Hope Natural Gas Company for the years 1937, 1938, and 1939. According to the Commission engineers, this vent gas is the property of Hope Natural Gas Company and no charge should have been made therefor by Hope Construction and Refining Company. Hope Construction and Refining Company records this charge in a compound journal entry. The company assumes that the vent gas returned is equal in value to the boiler gas and steam furnished by Hope Natural Gas Company to the gasoline plants, excepting the Goff plant, where the vent gases are metered. The entries recorded each month charge "Fuel and Power" with the boiler gas and steam consumed, and credit "Vapor Fuel Earnings" which is netted against "Contract Gas" on the earnings statements. The difference between the charge and credit, due to the Goff plant (See Fuel and Power Schedule No. A-3b), is credited to Hope Natural Gas Company. Hope Natural Gas Company records this net difference as a credit to "Miscellaneous Earnings."

If a complete reversal of the compound entry were made, namely, to reverse also the fuel charge, the gasoline earnings would be overstated, inasmuch as the cost of gasoline boiler fuel would be borne by Hope Natural Gas Company's gas compressor stations.

7 Entry No. 3 substitutes depreciation expense computed on rates furnished by the Commission engineers for the depreciation expense recorded on the books of account. It has been the company's policy to record depreciation expense on a straight line basis. The rates used on gasoline property have been 3% since 1934 (5% from 1920 to 1934) and 5% on butane property. The rate used in this study, as furnished by the Com-

mission engineers is 4.79% for both classes of property (See Schedules Nos. B–3 and B–5).

In addition, it has been the company's policy to charge or credit expenses under the accounts "Plant and Equipment Retirement" or "Profit or Loss from Sale of Capital Assets" with a calculated profit or loss resulting from the retirement of a capital asset. This profit or loss is computed by charging these accounts with the cost of the equipment retired or sold, and crediting the accounts with the salvage thereon and with the depreciation applicable thereto. The depreciation applicable thereto is the ratio which the total accumulated reserve bears at the beginning of the year, to the total investment by departments.

All of these entries have been set up by accounts and by years and have been posted to the appropriate adjustment columns on the West Virginia gasoline department, and the butane department earnings and expense schedules, Nos. A–3 and A–4.

*West Virginia Gasoline Department Earnings Statement—Schedule No. A–3 and Butane Department Earnings—Schedule No. A–4.*

In addition to being departmentalized, the revenue and expenses of Hope Construction and Refining Company are segregated between states. These segregations are accomplished by assigning directly to the proper department and state expenses as are readily identified as being applicable thereto, such as direct labor, materials, fuels, transportation expenses, rentals, etc.

Some expenses not readily assignable are allocated on the basis of gross investment; these are general office salaries and expenses, legal expenses, benefit plan expense, thrift plan expense and other miscellaneous expenses. Taxes are allocated on various bases; income tax on net earnings, franchise, capital stock, property taxes on gross investment, social security taxes on payrolls, etc. Depreciation, during the years included in this exhibit, is assigned directly to the depreciable property on which calculated. Gasoline depreciation is calculated at 3% of depreciable property and butane depreciation at 5%. Of the total thus calculated, 95% is deemed applicable to manufacturing facilities and 5% to shipping, handling, and storage facilities.

The amounts and bases of such allocations appear reasonable and the Examiners have made no adjustments by reason of these allocations.

Butane is extracted at only one plant, Hastings, located in West Virginia. All revenues from butane are allocated to the West Virginia district, but some of the expenses are allocated on the company's books to other states. An examination of these expenses indicates that they are primarily concerned with marketing butane produced at the Hastings plant, and as such, should be considered applicable to the revenue from that plant. In this exhibit the total net revenue from butane, including all expenses, has been presented rather than that of West Virginia only.

9 The revenues and expenses shown on the West Virginia gasoline department earnings statement for the year 1939 include revenues and expenses applicable to the Kennedy plant, operated in West Virginia and processing gas of Reserve Gas Company. This plant was purchased by Hope Construction and Refining Company from Reserve Gas Company on December 31, 1938. Though Reserve operated under its corporate identity during the year 1939, its common stock was owned by Hope Natural Gas Company. Reserve was merged with Hope Natural Gas Company on December 30, 1939, thus the fields from which Reserve drew its gas in 1939, will, in the future, be a part of the holdings of Hope Natural Gas Company.

Schedule No. A-3, "West Virginia Gasoline Department Earnings Statement," years 1937, 1938, and 1939, presents the sales, expenses, and net earnings for the years indicated. The schedule is further grouped to show these items as reflected on the books of the company, the Examiners' adjustments thereto, and the accounts as adjusted. The net effect of the Examiners' adjusting entries on the West Virginia gasoline earnings is a decrease, as follows:

| Particulars | 1937 | 1938 | 1939 |
|---|---|---|---|
| Net earnings, per books | $273,899.40 | $198,823.51 | *$210,157.38 |
| Examiners' adjustments | *65,875.03 | 66,144.06 | 78,137.45 |
| Adjusted earnings | 208,024.37 | 72,679.45 | 132,019.93 |

* Italic figures denote decrease.

Schedule No. A-3a supports and is in agreement with "Total Expenses" shown on Schedule No. A-3. This schedule presents the operating expenses in detail and, similar to Schedule

10 No. A-3, is divided to show expenses per books, adjustments thereto and the expenses as adjusted for the years indicated.

Schedule No. A-3b supports and is in agreement with the

"Fuel and Power" account shown on Schedule No. A–3a. This schedule is divided to show by years the amount and type of charge entering the fuel account of each plant. The column headed "Excess of Boiler Fuel over Vapor Fuel Returned" represents the net credit to Hope Natural Gas Company for the difference between boiler fuel furnished and the vapor fuel returned. This has been discussed above in Examiners' Adjusting Entry No. 2.

Schedule No. A–4, "Butane Department Earnings Statement," years 1937, 1938, and 1939, is similar in form and content to Schedule No. A–3. However, the net effect of the Examiners' adjustments of the Butane department earnings is an increase, as follows:

| Particulars | 1937 | 1938 | 1939 |
|---|---|---|---|
| Net earnings, per books | $181,786.70 | $110,546.45 | $165,720.09 |
| Examiners' adjustments | 23,862.82 | 17,488.10 | 26,443.65 |
| Adjusted earnings | 205,649.52 | 128,034.55 | 192,163.74 |

Schedule No. A–4a, "Butane Department Earnings," years 1937, 1938, and 1939, supports and is in agreement with "Total Expenses" shown on Schedule No. A–4. This schedule is similar in form and content to Schedule No. A–3a.

11. The earnings of Hope Construction and Refining Company applicable to the extraction of by-products from gas of Hope Natural Gas Company, as outlined above, are as follows:

HOPE CONSTRUCTION AND REFINING COMPANY

*Summary of West Virginia Gasoline and Butane Earnings*
*Years 1937; 1938, 1939*

| Particulars | 1937 | 1938 | 1939 |
|---|---|---|---|
| Net earnings, per books: | | | |
| West Virginia gasoline department | $273,899.40 | $168,823.51 | $210,157.38 |
| Butane department | 181,786.70 | 110,546.45 | 165,720.09 |
| Total | 455,686.10 | 279,369.96 | 375,877.47 |
| Examiners' adjustments: | | | |
| West Virginia gasoline department | *65,875.03* | *96,144.06* | *78,237.58* |
| Butane Department | 23,862.82 | 17,488.10 | 26,443.65 |
| Total | *42,012.21* | *78,655.96* | *51,793.93* |
| Net earnings, as adjusted: | | | |
| West Virginia gasoline department | 208,024.37 | 72,679.45 | 132,079.92 |
| Butane department | 205,649.52 | 128,034.55 | 192,163.74 |
| Total | 413,673.89 | 200,714.00 | 324,183.66 |

*B.—Investment and Depreciation Reserve.*

The books of account reflect investment in gasoline and butane plants by plants, but the reserve for depreciation is kept only by departments. In order to ascertain the investment and related reserve for depreciation the balances in plants were listed and this exhibit deals with all West Virginia plants, active or inactive, that have appeared in the gasoline investment ledger within the
12 past five years (1935 to 1939, inclusive). These are termed herein as "currently active West Virginia plants."

Hope Natural Gas Company sold all of its gasoline and butane investment to Hope Construction and Refining Company as of June 30, 1920 at net book cost. Several of the plants dealt with in this exhibit were constructed prior to 1920 and from the period of construction to June 30, 1920, were the property of Hope Natural Gas Company. These are the Bristol, Ellenboro, Goff, Hastings, Waverly, and Wright plants and certain investments termed as General.

This study traces each plant to its origin and no adjustments are made by reason of title transfer.

All credits appearing in the plant accounts were analyzed and the retirements of plant and salvage applicable thereto are summarized on Schedules Nos. B–1b, sheet 1, and B–1b, sheet 2, respectively. These sheets show the retirements and salvage, by years and by plants, of the currently active gasoline plants. Schedule No. B–1a shows the investment as of December 31, by plants and by years, 1914 to 1939, inclusive, in the currently active West Virginia plants.

*Currently Active West Virginia Plants.*

Schedules Nos. B–1b (1) and B–1a have been posted to a summary Schedule No. B–1, "Investment in Currently Active
13 West Virginia Plants, Excluding Kennedy Plant" in the appropriate column under caption "Investment per Books." In Schedule No. B–1 is a column for Examiners' adjustments and the adjusted investment in currently active West Virginia plants is extended to the right in four columns.

The adjustments appearing in Schedule No. B–1 are five in number, and are listed and described by individual entries shown on Schedule No. B–2, "Gasoline Investment—Adjusting Entries."

The adjusted gasoline investment shown on Schedule No. B–1 is posted to the first four columns on Schedule No. B–3 "Investment in Currently Active West Virginia Plants—Excluding Ken-

nedy Plant, and Related Reserve for Depreciation." The cost of the sites on which the plants were built was carried on the books of account as gasoline investment to 1937, but in 1938 was transferred to balance sheet account No. 302–3, "Other Lands, Leases, and Easements."

This cost, as carried on the gasoline investment ledger is shown on Schedule No. B–3 for the purpose of arriving at the depreciable plant balance. It has been assumed in this study that all gasoline investment, except the sites, is depreciable, and that the additions and retirements were incurred as of June 30 of each year. Thus the average balance less the cost of sites is listed under column headed "Average Depreciable Balance" on Schedule No. B–3.

14 To this balance is applied the depreciation rate supplied by the Commission engineer to arrive at the annual depreciation shown on Schedule No. B–3 under "Computed Reserve for Depreciation—Provision" column. Also under this "Computed Reserve for Depreciation" are columns for "Net Salvage" to which are posted the figures from Schedule No. B–1b, sheet 2, previously discussed, and for "Retirements" which are taken from similar column on Schedule No. B–1. The result is that the provision, plus salvage; less retirements, equals the balance of the reserve for depreciation applicable to the currently active West Virginia plants.

*Investment in Kennedy Gasoline Plant and Related Reserve for Depreciation—Schedule No. B–4.*

The Kennedy plant was acquired by Hope Construction and Refining Company as of December 31, 1938, from Reserve Gas Company. The investment on the books of Reserve Gas Company on that date was as follows:

| | |
|---|---|
| Book cost | $256,722.79 |
| Reserve for depreciation | 182,322.43 |
| Book value | 74,400.16 |

Hope Construction and Refining Company recorded the purchase on the books of account as follows:

| | | |
|---|---|---|
| Dr. Gasoline investment | $170,000.00 | |
| Property purchased account (Reserve Gas Company) | 170,000.00 | |
| Cr. Reserve Gas Company | | $170,000.00 |
| Property purchased account | | 170,000.00 |

15 For the purpose of this study the investment is deemed to be that carried on the books of Reserve Gas Company, and the related reserve for depreciation is computed with rates furnished by the Commission engineer on book balances from the date of construction to December 31, 1939, in the form and manner described for the other West Virginia plants.

Inasmuch as the revenues from this plant appear on the earnings statement for only the year 1939, the investment, reserve for depreciation and annual provision are also included in the summaries in this exhibit for only the year 1939.

*Butane Investment and Related Reserve for Depreciation—Schedule No. B–5.*

Schedule No. B–5 presents the butane investment and its related reserve for depreciation. Both the investment and its reserve have been prepared and computed in the same manner as that previously discussed for currently active West Virginia plants.

Schedule No. B–6 and Schedule No. B–6a are summaries. No. B–6 summarizes the investment and retirement reserve for the currently active West Virginia plants, the Kennedy plant, and the butane property as of December 31, 1937, 1938, and 1939, as shown on Schedules Nos. B–3, B–4, and B–5, respectively. Schedule No. B–6a is a condensed summary of the average investment, reserve, and net investment for each of those years.

16 The average net investment as shown on Schedule No. B–6a for each year is as follows:

| *Year* | *Amount* |
|---|---|
| 1937 | $681,131.57 |
| 1938 | 591,177.88 |
| 1939 | 563,227.65 |

*C—Working Capital.*

The working capital requirements of Hope Construction and Refining Company necessary for the conduct of its West Virginia gasoline and butane operations is estimated to be $80,000.00. This is the total of the inventory of gasoline and butane products, merchandise and forty-five days of adjusted operating expenses after deduction of taxes and depreciation, as follows:

| Particulars | 1937 | 1938 | 1939 | Average |
|---|---|---|---|---|
| Adjusted gasoline expenses | $480,329.66 | $411,972.84 | $479,039.13 | $457,113.88 |
| Adjusted butane expenses | 85,826.39 | 65,348.53 | 89,484.04 | 80,219.65 |
| Total | 566,156.05 | 477,321.37 | 568,523.17 | 537,333.53 |
| Less taxes and depreciation | 124,953.21 | 96,342.61 | 154,187.93 | 125,161.25 |
| Net | 441,202.84 | 380,978.76 | 414,335.24 | 412,172.28 |
| 45/360 of above | | | | |
| Gasoline and butane products | 55,150.36 | 47,622.35 | 51,791.90 | 51,521.54 |
| Butane merchandise | 17,936.27 | 30,313.28 | 17,715.00 | 22,000.18 |
| Automotive equipment | 3,124.12 | 3,340.21 | 4,364.45 | 3,609.59 |
| | | | | 2,120.80 |
| Total | | | | 79,252.11 |
| Say | | | | 80,000.00 |

Depreciation has been eliminated because it does not require a cash outlay. Taxes, with minor exceptions, are not payable until the year following that to which applicable.

17 No allowance has been made for prepayments since this item is relatively small and is more than offset by accounts payable. No allowance has been made for bank balances, inasmuch as the collection of taxes in advance of payment tends to build cash funds and also because the forty-five day lag in expenses is greater than is normally incurred in collection of revenue. The average balance, years 1937, 1938, 1939, in the gasoline and butane accounts receivable for the month of December represents only 19.63 days of the average sales for those years.

*D—Appendix—Balance Sheet and Balance Sheet Details.*

There is included in this exhibit Hope Construction and Refining Company's comparative balance sheets for the years 1937, 1938, and 1939 as Schedule No. D-1. The individual items on the balance sheet are analyzed in supporting schedules numbered D-1a to D-1g, inclusive. The amounts appearing on all of these schedules were taken from the books and records of the company and have not been adjusted.

*Conclusion.*

The results of the foregoing statements are summarized as follows:

| Particulars | 1937 | 1938 | 1939 |
|---|---|---|---|
| Average net investment | $681,131.57 | $591,177.88 | $563,227.67 |
| Working capital | 80,000.00 | 80,000.00 | 80,000.00 |
| Total | 761,131.57 | 671,177.88 | 643,227.67 |
| Earnings at 6% on above investment | 45,667.89 | 40,270.67 | 38,593.66 |
| Net earnings, as adjusted | 413,673.89 | 200,714.00 | 424,183.66 |
| Excess of adjusted earnings over 6% of average investment | 368,006.00 | 160,443.33 | 385,590.00 |

18 It is recommended that the accompanying entries (pages 19 to 21) be reflected in the Commission's rate study, in order that Hope Natural Gas Company may receive the proper credit for the products extracted from its gas. The credit to Hope Natural Gas Company is the excess of earnings after allowing Hope Construction and Refining Company all costs incurred in connection with the extraction of gasoline and other products plus a reasonable profit. It is recommended that the Commission determine the reasonable rate of return to be applied to the net original cost of Hope Construction and Refining Company property devoted to this phase of its operations. Pending a determination by the Commission, return has been computed herein at 6%.

ERNEST B. BLEASE.
Ernest B. Blease,
*Senior Examiner of Accounts.*

EDWARD L. DUNN.
Edward L. Dunn,
*Examiner in Charge of Field Assignment.*

CLARKSBURG, WEST VIRGINIA, March 12, 1941.

Approved:

W. E. BAKER,
W. E. Baker,
*Chief Accountant.*
CHAS. W. SMITH,
Chas. W. Smith,
*Chief, Bureau of Accounts, Finance and Rates.*

[Pages 19 to 30 omitted.]

## Hope Construction and Refining Company

*West Virginia Gasoline Department Earnings Statement Per Books and as Adjusted Years 1937, 1938, and 1939*

| Particulars | Per books | | | Examiners' adjustments | | | As adjusted | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1937 | 1938 | 1939 | 1937 | 1938 | 1939 | 1937 | 1938 | 1939 |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| Sales: | | | | | | | | | |
| Gallons sold | 13,915,175 | 11,682,889 | 16,755,531 | | | | 13,915,175 | 11,682,889 | 16,755,531 |
| Average price per gallon | $0.0495 | $0.0415 | $0.0365 | | | | $0.0495 | $0.0415 | $0.0365 |
| Amount | $688,354.03 | $484,652.29 | $611,059.05 | | | | $688,354.03 | $484,652.29 | $611,059.05 |
| Expenses: | | | | | | | | | |
| Production expense: | | | | | | | | | |
| Contract gas | $82,257.14 | $58,593.34 | $75,563.76 | *$82,076.76* | *$58,593.34* | *$75,563.76* | $180.38 | | |
| Less: Vapor fuel earnings | *26,189.14* | *19,771.12* | *31,486.94* | 26,189.14 | 19,771.12 | 31,486.94 | | | |
| Net cost of gas purchased | *55,887.08* | *39,177.78* | *44,076.82* | 55,887.08 | 39,177.78 | 44,076.82 | 180.38 | | |
| Labor | 51,528.46 | 50,386.47 | 50,198.33 | | | | 51,528.46 | $50,386.47 | $50,198.33 |
| Fuel and power | 147,686.82 | 135,224.89 | 124,730.63 | | | | 147,686.82 | 135,224.89 | 124,730.63 |
| Other production expenses | 73,052.09 | 75,377.62 | 81,253.50 | | | | 73,052.09 | 75,377.62 | 81,253.50 |
| Total direct production expense | 216,380.29 | 191,811.20 | 212,195.64 | 55,887.08 | 39,177.78 | 44,076.82 | 272,447.75 | 260,988.98 | 256,182.46 |
| Overhead | 30,134.25 | 21,830.18 | 24,380.17 | | | | 30,134.25 | 21,830.18 | 24,380.17 |
| Taxes | 8,234.42 | 7,267.83 | 6,682.16 | | | | 8,234.42 | 7,267.83 | 6,682.16 |
| Depreciation | 49,427.10 | 44,821.97 | 49,667.37 | 18,343.85 | 21,655.83 | 26,258.49 | 67,770.95 | 66,477.20 | 75,925.86 |
| Total indirect production expense | 87,795.77 | 73,919.98 | 80,729.70 | 18,343.85 | 21,655.83 | 26,258.49 | 106,139.62 | 95,575.21 | 106,938.19 |
| Total production expense | 304,176.06 | 265,730.98 | 292,925.34 | 74,230.93 | 60,833.61 | 70,335.31 | 378,587.37 | 356,564.19 | 363,120.65 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline purchased | 14,757.64 | 16,243.12 | 8,778.08 | | | | 14,757.64 | 16,243.12 | 8,778.08 |
| Inventory fluctuations | *6,542.97* | *12,644.68* | 11,302.77 | | | | *6,542.97* | *12,644.68* | 11,302.77 |
| Total cost of gasoline sold | 312,590.73 | 269,320.08 | 312,926.89 | 74,417.31 | 80,833.61 | 70,335.31 | 387,002.04 | 350,162.69 | 383,269.50 |
| Shipping, handling, and storage expenses | 41,583.18 | 39,557.43 | 39,249.80 | 965.45 | 1,149.76 | 1,382.13 | 45,558.63 | 40,697.19 | 40,631.93 |
| Administrative and general expenses | 35,095.69 | 13,238.06 | 18,137.47 | | | | 35,095.69 | 13,238.06 | 18,137.47 |
| Federal income tax | 16,000.00 | | 29,333.60 | | | | 16,000.00 | | 29,333.60 |
| Other miscellaneous charges and credits | 6,175.03 | *6,295.81* | 1,254.61 | *3,509.75* | *4,170.69* | *5,420.02* | *5,586.70* | *2,185.12* | 7,674.63 |
| Total expense | 414,454.63 | 315,828.78 | 400,901.67 | 65,875.03 | 96,144.06 | 78,437.46 | 480,329.66 | 411,972.84 | 479,639.13 |
| Net earnings | 273,899.40 | 168,823.51 | 210,157.38 | *65,875.03* | *96,144.06* | *78,137.46* | 208,024.37 | 72,679.45 | 132,019.92 |

Italic figures denote decrease.

[Pages 32 to 33 omitted.]

*Butane Departing at cravings statement per books and as adjusted years 1937, 1938, and 1939*

| Particulars | Per books | | | Examiners' adjustments | | | As adjusted | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1937 | 1938 | 1939 | 1937 | 1938 | 1939 | 1937 | 1938 | 1939 |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) |
| Sales: | | | | | | | | | |
| Gallons sold | 4,394,314 | 3,417,713 | 5,173,305 | | | | 4,394,314 | 3,417,713 | 5,173,305 |
| Average price per gallon | $0.0663 | $0.0566 | $0.0544 | | | | $0.0663 | $0.0566 | $0.0544 |
| Amount | $291,475.91 | $193,383.08 | $281,647.78 | | | | $291,475.91 | $193,383.08 | $281,647.78 |
| Expenses: | | | | | | | | | |
| Production expense: | | | | | | | | | |
| Contract gas | $28,559.07 | $16,960.54 | $25,915.65 | *$23,559.07* | *$16,960.54* | *$25,915.65* | | | |
| Labor | 4,010.49 | 4,118.41 | 4,261.70 | | | | $4,010.49 | $4,118.41 | $4,261.70 |
| Other production expenses | 5,350.35 | 3,948.55 | 4,883.35 | | | | 5,350.35 | 3,948.55 | 4,883.35 |
| Total direct production expense | 32,919.91 | 25,057.50 | 35,060.70 | *23,559.07* | *16,960.54* | *25,915.65* | 9,360.84 | 8,066.96 | 9,145.05 |
| Overhead | 3,568.76 | 2,649.93 | 2,995.31 | | | | 3,568.76 | 2,649.93 | 2,995.31 |
| Taxes | 1,843.68 | 1,570.94 | 1,659.90 | | | | 1,843.68 | 1,570.94 | 1,659.90 |
| Depreciation | 12,170.89 | 12,333.84 | 12,373.54 | *471.49* | *502.38* | *501.83* | 11,699.47 | 11,826.46 | 11,873.71 |
| Total indirect production expense | 17,583.33 | 16,554.71 | 17,039.75 | *471.49* | *502.38* | *501.83* | 17,111.91 | 16,047.33 | 16,528.92 |
| Total production expense | 50,503.24 | 41,612.21 | 52,091.45 | *24,030.49* | *17,497.92* | *26,417.48* | 26,472.75 | 24,114.29 | 25,673.97 |
| Inventory fluctuation | *2,979.86* | *302.27* | *2,625.51* | | | | *2,979.86* | *302.27* | *2,625.51* |
| Total cost of butane sold | 47,523.38 | 41,309.94 | 49,465.94 | *24,030.49* | *17,497.92* | *26,417.48* | 23,492.89 | 23,812.02 | 23,048.46 |
| Shipping, storage, and handling | 34,560.92 | 26,481.01 | 30,533.32 | *24.82* | *26.68* | *29.33* | 34,536.10 | 26,454.33 | 30,000.99 |
| Marketing expense | 8,119.19 | 8,260.24 | 8,580.47 | | | | 8,119.19 | 8,260.24 | 8,580.47 |
| Administrative and general expense | 8,411.17 | 6,629.73 | 9,562.63 | | | | 8,411.17 | 6,629.73 | 9,562.63 |
| Federal income tax | 11,000.00 | | 18,333.00 | | | | 11,000.00 | | 18,333.00 |
| Other miscellaneous charges and credits | 74.55 | 146.71 | *47.67* | 192.70 | 36.50 | 16 | *267.04* | 183.21 | *47.51* |
| Total expense | 109,689.21 | 82,830.63 | 115,927.09 | *23,862.82* | *17,488.10* | *26,443.65* | 85,826.39 | 65,348.53 | 89,484.04 |
| Net earnings | 181,786.70 | 110,553.45 | 165,720.09 | *23,862.82* | *17,488.10* | *26,443.65* | 205,649.52 | 128,041.55 | 192,163.74 |

Italic figures denote decrease. [Pages 35 to 45 omitted.]

*Investment in currently active West Virginia plants Excluding Kennedy Plant and related reserve for depreciation Period 1914 to 1939, inclusive*

| Year | Adjusted gasoline plant investment | | | | Cost of sites | Average depreciable balance | Computed reserve for depreciation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Balance Jan. 1 | Additions | Retirements | Balance Dec. 31 | | | Balance Jan. 1 | Provision 4.79% | Net salvage | Retirements | Balance Dec. 31 |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) |
| 1914 | | $174,106 87 | $458 80 | $172,648 07 | $88 00 | $86,975 04 | | $4,118 20 | $263 06 | $458 80 | $3,922 46 |
| 1915 | $172,648 07 | 5,787 42 | 5,813 79 | 172,571 70 | 688 00 | 175,911 89 | $3,922 46 | 9,234 58 | 4,764 18 | 5,813 79 | 11,107 43 |
| 1916 | 172,571 70 | 140,487 01 | 1,202 19 | 312,056 52 | 4,624 75 | 239,352 73 | 11,107 43 | 11,479 37 | 935 76 | 1,202 19 | 22,320 37 |
| 1917 | a12,056 52 | 52,107 52 | 700 00 | 363,464 04 | 5,972 75 | 332,101 53 | 22,320 37 | 15,924 91 | 575 00 | 700 00 | 38,120 28 |
| 1918 | 363,464 04 | 473,725 55 | 85,463 01 | 751,726 58 | 7,697 75 | 539,790 06 | 38,120 28 | 26,381 41 | 77,411 49 | 85,463 01 | 56,450 17 |
| 1919 | 751,726 58 | 161,335 52 | 8,037 66 | 905,024 44 | 6,806 75 | 821,078 26 | 56,450 17 | 39,326 65 | 5,252 23 | 8,037 66 | 92,994 39 |
| 1920 | 905,024 44 | 67,226 03 | 4,023 72 | 968,224 75 | 5,684 50 | 930,333 97 | 92,994 39 | 44,563 00 | 2,472 45 | 4,023 72 | 136,006 12 |
| 1921 | 968,224 75 | 3,417 69 | 17,320 70 | 947,486 36 | 5,688 50 | 952,169 05 | 136,006 12 | 45,608 90 | 10,700 72 | 17,320 70 | 174,995 04 |
| 1922 | 947,486 36 | 33,339 37 | 2,605 53 | 978,220 20 | 5,688 50 | 957,164 78 | 174,995 04 | 45,848 19 | 1,559 23 | 2,605 53 | 219,796 93 |
| 1923 | 978,220 20 | 62,921 04 | 4,412 96 | 1,036,428 28 | 5,688 50 | 1,001,635 74 | 219,796 93 | 47,978 35 | 2,934 36 | 4,412 96 | 266,296 68 |
| 1924 | 1,036,428 28 | 252,758 56 | 20,453 42 | 1,268,733 42 | 12,513 50 | 1,143,479 85 | 266,296 68 | 54,772 68 | 14,953 02 | 20,453 42 | 315,568 99 |
| 1925 | 1,268,733 42 | 36,196 15 | 4,377 26 | 1,300,552 31 | 12,413 50 | 1,272,179 37 | 315,568 99 | 60,937 39 | 1,810 13 | 4,377 26 | 373,939 25 |
| 1926 | 1,300,552 31 | 330,123 69 | 11,155 56 | 1,619,520 44 | 12,413 50 | 1,447,622 88 | 373,939 25 | 69,341 14 | 903 72 | 11,155 56 | 433,028 55 |
| 1927 | 1,619,520 44 | 38,023 23 | 1,997 16 | 1,655,546 51 | 12,413 50 | 1,625,119 97 | 433,028 55 | 77,843 25 | 815 64 | 1,997 16 | 509,690 28 |
| 1928 | 1,655,546 51 | 14,232 14 | 10,474 38 | 1,643,859 99 | 12,413 50 | 1,637,279 75 | 509,690 28 | 78,425 70 | 994 65 | 10,474 38 | 578,636 25 |
| 1929 | 1,643,859 99 | 96,611 48 | 13,171 15 | 1,727,280 32 | 12,413 50 | 1,673,146 66 | 578,636 25 | 80,143 73 | 10,483 31 | 13,171 15 | 656,092 14 |
| 1930 | 1,727,280 32 | 64,853 40 | 33,257 89 | 1,758,875 83 | 12,413 50 | 1,730,664 57 | 656,092 14 | 82,808 83 | 41,704 40 | 33,257 89 | 717,437 48 |
| 1931 | 1,758,875 83 | 27,809 17 | 50,364 76 | 1,736,320 24 | 12,413 50 | 1,735,184 53 | 717,437 48 | 83,115 34 | 18,515 21 | 50,364 76 | 768,703 27 |
| 1932 | 1,736,320 24 | 8,842 86 | 129,191 88 | 1,615,971 22 | 12,413 50 | 1,663,732 23 | 768,703 27 | 79,692 77 | 1,482 55 | 129,191 88 | 720,686 71 |
| 1933 | 1,615,971 22 | 3,239 83 | 8,970 78 | 1,610,240 27 | 12,413 50 | 1,600,692 25 | 720,686 71 | 76,673 16 | 4,710 55 | 8,970 78 | 793,099 64 |
| 1934 | 1,610,240 27 | 12,303 49 | 6,081 56 | 1,616,462 20 | 12,413 50 | 1,600,937 73 | 793,099 64 | 76,684 92 | 2,408 39 | 6,081 56 | 866,111 39 |
| 1935 | 1,616,462 20 | 4,483 88 | 91,997 71 | 1,528,948 37 | 12,413 50 | 1,560,291 79 | 866,111 39 | 74,737 98 | 12,162 08 | 91,997 71 | 861,013 74 |
| 1936 | 1,528,948 37 | 7,845 82 | 8,223 22 | 1,528,570 97 | 12,413 50 | 1,516,346 17 | 861,013 74 | 72,632 98 | 3,713 43 | 8,223 22 | 929,136 93 |
| 1937 | 1,528,570 97 | 4,968 19 | 51,456 22 | 1,473,046 56 | 10,588 50 | 1,480,307 77 | 929,136 93 | 71,337 84 | 24,039 43 | 51,456 22 | 973,057 98 |
| 1938 | 1,473,046 56 | 3,079 58 | 16,830 61 | 1,459,295 53 | | 1,460,876 80 | 973,057 98 | 69,976 00 | 5,154 67 | 16,830 61 | 1,031,358 04 |
| 1939 | 1,459,295 53 | 1,754 91 | 28,088 98 | 1,429,952 34 | | 1,444,623 94 | 1,031,358 04 | 69,197 49 | 12,814 53 | 28,088 98 | 1,085,281 08 |
| Total | (Schedule B-1) | 2,046,083 24 (Schedule B-1) | 616,130 90 (Schedule B-1) | 1,429,952 34 (Schedule B-1) | (Schedule B-3a) | | | 1,467,877 76 | 233,534 22 (Schedule B-1b) | 616,130 90 (Schedule B-1) | 1,085,281 08 |

Italic figures denote decrease.

[Page 47 omitted.]

## HOPE CONSTRUCTION AND REFINING COMPANY

*Investment in Kennedy Gasoline Plant and Related Reserve for Depreciation—Period 1915 to 1939, Inclusive*

| Year | Investment | | | | Cost of sites | Average depreciable balance | Computed reserve for depreciation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Balance Jan. 1 | Additions | Retirements | Balance Dec. 31 | | | Balance Jan. 1 | Provision 16% | Net salvage | Retirements | Balance Dec. 31 |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) |
| 1915 | | $830.30 | | $830.30 | | $415.15 | | $17.27 | | | $17.27 |
| 1916 | $830.30 | 90,222.48 | $11.00 | 91,041.78 | $286.00 | 45,793.04 | $17.27 | 1,904.99 | $4.40 | $11.00 | 1,915.66 |
| 1917 | 91,041.78 | 55,311.24 | 1,305.74 | 145,047.28 | 286.00 | 117,758.53 | 1,915.66 | 4,898.75 | 1,096.16 | 1,305.74 | 6,604.83 |
| 1918 | 145,047.28 | 35,812.84 | 1,595.93 | 179,264.19 | 1,600.00 | 161,212.74 | 6,604.83 | 6,706.45 | 1,097.74 | 1,595.93 | 12,723.09 |
| 1919 | 179,264.19 | 41,838.25 | 2,286.89 | 218,810.55 | 1,600.00 | 197,437.37 | 12,723.09 | 8,213.39 | 1,658.97 | 2,286.89 | 20,308.56 |
| 1920 | 218,810.55 | 6,066.28 | 8,360.54 | 204,383.73 | 286.00 | 210,654.14 | 20,308.56 | 8,763.21 | 5,518.08 | 8,360.54 | 26,229.31 |
| 1921 | 204,383.73 | 845.14 | 55.10 | 205,173.77 | 286.00 | 204,492.75 | 26,229.31 | 8,506.90 | 30.00 | 55.10 | 34,711.11 |
| 1922 | 205,173.77 | 4,281.51 | 122.58 | 209,332.70 | 286.00 | 206,967.29 | 34,711.11 | 8,609.84 | 54.03 | 122.58 | 43,252.40 |
| 1923 | 209,332.70 | 2,441.84 | | 211,774.54 | 286.00 | 210,267.62 | 43,252.40 | 8,747.13 | | | 51,999.53 |
| 1924 | 211,774.54 | 5,459.34 | 504.12 | 216,729.76 | 286.00 | 213,966.15 | 51,999.53 | 8,900.99 | | 504.12 | 60,396.40 |
| 1925 | 216,729.76 | 12,510.48 | | 229,240.24 | 286.00 | 222,699.00 | 60,396.40 | 9,264.28 | | | 69,660.68 |
| 1926 | 229,240.24 | 918.99 | 130.00 | 230,029.23 | 286.00 | 229,348.74 | 69,660.68 | 9,540.91 | 104.00 | 130.00 | 79,175.59 |
| 1927 | 230,029.23 | 747.97 | | 230,777.20 | 286.00 | 230,117.21 | 79,175.59 | 9,572.88 | | | 88,748.47 |
| 1928 | 230,777.20 | 1,006.20 | | 231,783.40 | 286.00 | 230,994.30 | 88,748.47 | 9,609.36 | | | 98,357.83 |
| 1929 | 231,783.40 | 619.08 | | 232,402.48 | 286.00 | 231,806.94 | 98,357.83 | 9,643.17 | | | 108,001.00 |
| 1930 | 232,402.48 | 15,097.31 | 3,472.71 | 244,027.08 | 286.00 | 237,928.78 | 108,001.00 | 9,897.84 | 2,443.07 | 3,472.71 | 116,869.20 |
| 1931 | 244,027.08 | 2,362.73 | | 246,389.81 | 286.00 | 244,922.45 | 116,869.20 | 10,188.77 | | | 127,057.97 |
| 1932 | 246,389.81 | 57.14 | | 246,446.95 | 286.00 | 246,132.48 | 127,057.97 | 10,239.11 | | | 137,297.08 |
| 1933 | 246,446.95 | 1,059.75 | | 247,506.70 | 286.00 | 246,689.83 | 137,297.08 | 10,262.30 | | | 147,559.38 |
| 1934 | 247,506.70 | 437.63 | 399.93 | 247,544.40 | 286.00 | 247,239.55 | 147,559.38 | 10,285.17 | 319.94 | 399.93 | 157,764.56 |
| 1935 | 247,544.40 | 5,133.05 | 2,014.39 | 250,663.06 | 286.00 | 248,817.73 | 157,764.56 | 10,350.82 | 53.40 | 2,014.39 | 166,594.39 |
| 1936 | 250,663.06 | 8,083.49 | 136.08 | 258,610.41 | 286.00 | 254,350.73 | 166,594.39 | 10,580.99 | 100.55 | 136.08 | 177,139.85 |
| 1937 | 258,610.41 | 718.68 | 2,723.46 | 256,605.63 | 286.00 | 257,322.02 | 177,139.85 | 10,704.60 | 843.69 | 2,723.46 | 185,964.68 |
| 1938 | 256,605.63 | 716.96 | | 256,722.59 | | 256,521.11 | 185,964.68 | 10,671.28 | | | 196,635.96 |
| 1939 | 256,722.59 | 2,194.15 | 40.08 | 258,876.66 | | 257,799.62 | 196,635.96 | 10,724.46 | 1.87 | 40.08 | 207,322.21 |
| Total | | 282,035.21 | 23,158.55 | 258,876.66 | | | | 216,804.86 | 13,675.90 | 23,158.55 | 207,322.21 |

Italic figures denote decrease.

## HOPE CONSTRUCTION AND REFINING COMPANY

Schedule No. B-5

*Butane Investment and Related Reserve for Depreciation Period 1918 to 1939, Inclusive*

| Year | Butane investment | | | | Average depreciable balance | Computed reserve for depreciation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Balance Jan. 1 | Additions | Retirements | Balance Dec. 31 | | Balance Jan. 1 | Provision 4.7% | Salvage | Retirements | Balance Dec. 31 |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) |
| 1918 | | | $1,942.44 | | $1,942.44 | $971.22 | | $46.52 | | | $46.52 |
| 1919 | $1,942.44 | 3,897.31 | | | 5,839.75 | 3,891.09 | $46.52 | 186.38 | | | 232.90 |
| 1920 | 5,839.75 | 32,465.89 | $254.94 | | 38,050.70 | 21,945.22 | 232.90 | 1,051.18 | $203.95 | $254.94 | 1,233.09 |
| 1921 | 38,050.70 | 12,130.42 | 201.49 | | 49,979.63 | 44,015.16 | 1,233.09 | 2,108.33 | 164.78 | 201.49 | 3,304.71 |
| 1922 | 49,979.63 | 5,220.26 | | | 55,199.89 | 52,589.76 | 3,304.71 | 2,519.05 | | | 5,823.76 |
| 1923 | 55,199.89 | 15,737.64 | | | 70,937.53 | 63,068.71 | 5,823.76 | 3,020.99 | | | 8,844.75 |
| 1924 | 70,937.53 | 14,261.37 | 267.87 | | 84,931.03 | 77,934.28 | 8,844.75 | 3,733.05 | 280.00 | 267.87 | 12,589.93 |
| 1925 | 84,931.03 | 13,669.49 | 1,537.21 | | 97,063.31 | 90,997.17 | 12,589.93 | 4,358.76 | 190.75 | 1,537.21 | 15,602.23 |
| 1926 | 97,063.31 | 14,341.51 | 931.48 | | 110,473.34 | 103,768.33 | 15,602.23 | 4,970.50 | 718.87 | 931.48 | 20,360.12 |
| 1927 | 110,473.34 | 4,364.33 | 88.18 | | 114,749.49 | 112,611.41 | 20,360.12 | 5,394.09 | 119.70 | 88.18 | 25,785.73 |
| 1928 | 114,749.49 | 25,143.27 | *117.63* | | 140,010.39 | 127,379.44 | 25,785.73 | 6,101.48 | *200.09* | *117.63* | 31,804.84 |
| 1929 | 140,010.39 | 35,006.42 | *84.19* | | 175,101.00 | 157,555.69 | 31,804.84 | 7,546.92 | *60.00* | *84.19* | 39,375.95 |
| 1930 | 175,101.00 | 49,451.73 | | | 224,552.73 | 199,826.87 | 39,375.95 | 9,571.71 | | | 48,947.66 |
| 1931 | 224,552.73 | 36,039.67 | 510.28 | | 260,082.12 | 242,317.42 | 48,947.66 | 11,607.00 | 457.50 | 510.28 | 60,501.88 |
| 1932 | 260,082.12 | 6,248.64 | 313.34 | | 266,017.42 | 263,049.77 | 60,501.88 | 12,600.08 | 275.00 | 313.34 | 73,063.62 |
| 1933 | 266,017.42 | 11,695.76 | 277.07 | | 277,436.11 | 271,726.77 | 73,063.62 | 13,015.71 | 308.75 | 277.07 | 86,111.01 |
| 1934 | 277,436.11 | 2,230.52 | 326.48 | | 279,340.15 | 278,388.13 | 86,111.01 | 13,334.79 | 315.28 | 326.48 | 99,434.60 |
| 1935 | 279,340.15 | 3,698.23 | 27,188.79 | | 255,849.59 | 267,594.87 | 99,434.60 | 12,817.79 | 22,982.42 | 27,188.79 | 108,046.02 |
| 1936 | 255,849.59 | 898.73 | 2,127.31 | | 254,621.01 | 255,235.30 | 108,046.02 | 12,225.77 | 1,490.83 | 2,127.31 | 119,605.31 |
| 1937 | 254,621.01 | 5,714.51 | 750.80 | | 259,584.72 | 257,102.87 | 119,605.31 | 12,315.23 | 590.17 | 750.80 | 131,759.91 |
| 1938 | 259,584.72 | 731.96 | 113.74 | | 260,202.94 | 259,893.83 | 131,759.91 | 12,448.91 | 91.48 | 113.74 | 144,186.56 |
| 1939 | 260,202.94 | 1,534.92 | 74.24 | | 261,663.62 | 260,933.28 | 144,186.56 | 12,498.70 | 40.52 | 74.24 | 156,651.54 |
| Total | | 286,425.02 | 34,761.40 | | 261,663.62 | | | 163,472.54 | 27,940.00 | 34,761.40 | 156,651.54 |

Italic figures denote decrease.

## HOPE CONSTRUCTION AND REFINING COMPANY

*Summary of Gasoline and Butane Investment as of December 31, 1937, 1938, and 1939*

Schedule No. B-6

| | Gasoline investment. | | | Butane investment | Total investment considered | Other States | Total per books |
|---|---|---|---|---|---|---|---|
| | Other West Virginia plants | Kennedy plant | Total West Virginia | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| *Year 1939* | | | | | | | |
| Investment, per books | $1,566,830.30 | $170,726.82 | $1,737,557.12 | $261,663.62 | $1,999,220.74 | $526,594.65 | $2,525,815.39 |
| Examiners' adjustments | *136,877.96* | *88,149.84* | *48,728.12* | | *48,728.12* | | |
| Investment, as adjusted | 1,429,952.34 | 258,876.66 | 1,688,829.00 | 261,663.62 | 1,950,492.62 | | |
| Reserve for depreciation, per books | | | | | | | 1,874,788.10 |
| Reserve for depreciation, computed | 1,085,281.08 | 207,322.21 | 1,292,603.29 | 156,651.54 | 1,449,254.83 | | |
| Net investment, adjusted | 344,671.26 | 51,554.45 | 396,225.71 | 105,012.08 | 501,237.79 | | 651,027.29 |
| *Year 1938* | | | | | | | |
| Investment, per books | 1,573,466.99 | | 1,573,466.99 | 260,202.94 | 1,833,669.93 | | 2,636,011.24 |
| Examiners' adjustments | *114,171.46* | | *114,171.46* | | *114,171.46* | | |
| Investment, as adjusted | 1,459,295.53 | | 1,459,295.53 | 260,202.94 | 1,719,498.47 | | |
| Reserve for depreciation, per books | | | | | | | 1,879,505.35 |
| Reserve for depreciation, computed | 1,031,358.04 | | 1,031,358.04 | 144,186.56 | 1,175,544.60 | | |
| Net investment, adjusted | 427,937.49 | | 427,937.49 | 116,016.38 | 543,953.87 | | 756,505.89 |
| *Year 1937* | | | | | | | |
| Investment, per books | 1,587,218.02 | | 1,587,218.02 | 259,584.72 | 1,846,802.74 | | 2,473,907.90 |
| Examiners' adjustments | *114,171.46* | | *114,171.46* | | *114,171.46* | | |
| Investment, as adjusted | 1,473,046.56 | | 1,473,046.56 | 259,584.72 | 1,732,631.28 | | |
| Reserve for depreciation, per books | | | | | | | 1,839,028.72 |
| Reserve for depreciation, computed | 973,057.98 | | 973,057.98 | 131,759.91 | 1,104,817.89 | | |
| Net investment, adjusted | 499,988.58 | | 499,988.58 | 127,824.81 | 627,813.39 | | 634,809.18 |

Bold figures denote decrease.

## Hope Construction and Refining Company

### *Average Net Investment in West Virginia Gasoline and Butane Properties*

| Details from adjusted balances | West Virginia gasoline | Butane | Total |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| *Year 1937* | | | |
| Investment: | | | |
| Balance Jan. 1 | $1,528,570.97 | $254,621.01 | $1,783,191.98 |
| Balance Dec. 31 | 1,473,046.56 | 259,584.72 | 1,732,631.28 |
| Total | 3,001,617.53 | 514,205.73 | 3,515,823.26 |
| Average | 1,500,808.76 | 257,102.87 | 1,757,911.63 |
| Reserve for depreciation: | | | |
| Balance Jan. 1 | 929,120.93 | 119,605.31 | 1,048,742.24 |
| Balance Dec. 31 | 973,057.98 | 131,759.91 | 1,104,817.89 |
| Total | 1,902,194.91 | 251,365.22 | 2,153,560.13 |
| Average | 951,097.45 | 125,682.61 | 1,076,780.06 |
| Net investment | 549,711.31 | 131,420.26 | 681,131.57 |
| *Year 1938* | | | |
| Investment: | | | |
| Balance Jan. 1 | 1,473,046.56 | 259,584.72 | 1,732,631.28 |
| Balance Dec. 31 | 1,469,884.03 | 260,202.94 | 1,730,086.97 |
| Total | 2,942,930.59 | 519,787.66 | 3,462,718.25 |
| Average | 1,471,465.29 | 259,893.83 | 1,731,359.12 |
| Reserve for depreciation: | | | |
| Balance Jan. 1 | 973,057.98 | 131,759.91 | 1,104,817.89 |
| Balance Dec. 31 | 1,031,358.04 | 144,180.56 | 1,175,544.60 |
| Total | 2,004,416.02 | 275,940.47 | 2,280,362.49 |
| Average | 1,002,208.01 | 137,973.23 | 1,140,181.24 |
| Net investment | 469,257.28 | 121,920.60 | 591,177.88 |
| *Year 1939* | | | |
| Investment (including Kennedy plant): | | | |
| Balance Jan. 1 | 1,726,600.62 | 260,202.94 | 1,986,803.56 |
| Balance Dec. 31 | 1,699,417.50 | 261,663.62 | 1,961,081.12 |
| Total | 3,426,018.12 | 521,866.56 | 3,947,884.68 |
| Average | 1,713,009.06 | 260,933.28 | 1,973,942.34 |

See footnote at end of table.

*Average Net Investment in West Virginia Gasoline and Butane Property—* Continued

| Details from adjusted balances | West Virginia gasoline | Butane | Total |
|---|---|---|---|
| (a) | (b) | (c) | (d) |
| *Prior 1939.*[1] | | | |
| Reserve for depreciation (including Kennedy): | | | |
| Balance Jan. 1 | $1,227,994.00 | $144,186.56 | $1,372,180.56 |
| Balance Dec. 31 | 1,292,603.29 | 156,651.54 | 1,449,254.83 |
| Total | 2,520,597.29 | 300,838.10 | 2,821,435.39 |
| Average | 1,260,298.64 | 150,419.05 | 1,410,717.69 |
| Net investment | 452,713.42 | 110,514.23 | 563,227.65 |

[1] Includes $10,588.50 in gasoline investment for cost of sites carried on books in account No. 302-3—Other Lands, Leases, and Easements.

[Pages 52 to 64 omitted.]

## EXHIBIT NO. 127.—COMPARISON OF METHODS AND RESULTS OF COMMISSION STAFF'S RECOMMENDATION AND COMPANY'S WITNESSES' RECOMMENDATIONS FOR PROPER CREDIT ON ACCOUNT OF GASOLINE AND BUTANE EXTRACTION, F. P. C. WITNESS BLEASE

| | Reference | Year | | | | Reference to 1940 |
|---|---|---|---|---|---|---|
| | | 1937 | 1938 | 1939 | 1940 | |
| Computed credit to Hope Natural Gas Company: | | | | | | |
| Average gasoline and butane plant investment | Ex. 62, p. 51 | $1,757,911.63 | $1,731,359.12 | $1,973,945.31 | $1,955,758.13 | Ex. 78, p. 31. |
| Average reserve or depreciation | do | 1,076,780.06 | 1,140,181.24 | 1,410,717.69 | 1,473,029.02 | Do. |
| Average net investment | do | 681,131.57 | 591,177.88 | 563,227.65 | 482,729.11 | Do. |
| Less: Kennedy plant net investment, per stipulation | Ex. 78, p. 32 | | | 55,820.54 | 46,532.13 | Ex. 78, p. 32. |
| Balance of net investment | | 681,131.57 | 591,177.88 | 507,407.11 | 436,196.98 | |
| Working capital | Ex. 63, p. 16 | 80,000.00 | 80,000.00 | 80,000.00 | 80,000.00 | Ex. 78, p. 31. |
| Total West Virginia gasoline and butane net investment | | 761,131.57 | 671,177.88 | 587,407.11 | 516,196.98 | |
| Return at 6% on above investment | | 45,667.89 | 40,270.67 | 35,244.43 | 30,971.82 | |
| Gasoline and butane net earnings, adjusted | Ex. 63, p. 17 | 413,673.89 | 200,714.00 | 324,183.66 | 232,490.65 | Ex. 78, p. 27, 28. |
| Less: Kennedy plant net earnings, per stipulation | Ex. 78, p. 32 | | | 51,126.82 | 13,834.22 | Ex. 78, p. 32. |
| Balance of West Virginia gasoline and butane earnings | | 413,673.89 | 200,714.00 | 273,056.84 | 218,656.43 | |
| Excess of above earnings over 6% of net investment, recommended as proper credit to Hope Natural Gas Company, by Commission staff. | | 368,006.00 | 160,443.33 | 237,812.41 | 187,684.61 | |
| Additional adjustments recommended on Hope Natural Gas Company books of account: | | | | | | |
| Reversal of its royalty | Ex. 63, p. 19 | *105,635.83* | *75,583.88* | *86,764.27* | *80,591.66* | Stipulation. |
| Reversal of vent gas charge (excess of vent gas over recorded amounts on books). | do | 138,144.22 | 127,771.12 | 117,640.58 | 119,592.32 | Ex. 78, p. 29. |
| Additional net adjustment over amount recorded on books | | 32,508.39 | 52,187.24 | 30,876.31 | 39,000.66 | |
| Total adjustments (increase of credit to Hope Natural Gas Company over recorded credits). | | 400,514.39 | 212,630.57 | 268,688.72 | 226,685.27 | |

## EXHIBIT NO. 127.— COMPARISON OF METHODS AND RESULTS OF COMMISSION STAFF'S RECOMMENDATION AND COMPANY'S WITNESSES' RECOMMENDATIONS FOR PROPER CREDIT ON ACCOUNT OF GASOLINE AND BUTANE EXTRACTION, F. P. C. WITNESS BLEASE—Continued

| | Reference | Year | | | | Reference to 1940 |
|---|---|---|---|---|---|---|
| | | 1937 | 1938 | 1939 | 1940 | |
| Recorded credits on Hope Natural Gas Company's books: Difference between vent gas charge and fuel expense | [Ex. 63, p. 33 [Ex. 63, p. 6 | $4,286.10 | $2,196.70 | $4,403.67 | $6,000.30 | Ex. 78, p. 41. |
| Royalty received, ⅛ of net sales | Ex. 63, p. 19 | 105,635.83 | 75,583.88 | 86,764.27 | 80,591.66 | Stipulation. |
| Total recorded credit | | 109,921.93 | 77,780.48 | 91,167.94 | 86,591.96 | |
| Total credit recommended by commission examiners (sum o adjustments plus booked credits) | | 510,436.32 | 290,411.05 | 359,856.66 | 313,277.23 | |
| Company witness, George I. Rhodes' adjustment to ⅛ of net sales of gasoline and butane as proper royalty. | Ex. 37, p. 21, 28, 37. | 105,635.83 | 75,583.88 | 86,764.27 | 80,591.66 | Computed here, not shown in Ex. 37 or 1940. |
| Recorded credits (as above) | | 109,921.93 | 77,780.48 | 91,167.94 | 86,591.96 | |
| Total credit recommended by Rhodes | | 215,557.76 | 153,364.36 | 177,932.21 | 167,183.62 | |
| Difference (commission staff over Rhodes) | | 294,878.56 | 137,046.69 | 181,924.45 | 146,093.61 | |
| Vent gas returned not adjusted by Rhodes | Ex. 63, p. 19 | 138,144.22 | 127,771.12 | 117,640.58 | 119,592.32 | |
| Net difference (commission staff over Rhodes) | | 156,734.34 | 9,275.57 | 64,283.87 | 26,501.29 | |

*Italic figures denote decrease.*

4 **EXHIBIT NO. 82.—RATE OF RETURN, VOLUME I, F. P. C. WITNESS KNAPP**[1]

## WRITTEN STATEMENT

*Introduction.*

I have been instructed to prepare an exhibit setting forth the more important facts relative to general economic and financial conditions which should be considered in arriving at a fair and reasonable rate of return for Hope Natural Gas Company.

*Definition of "Rate of Return."*

The "return" received by a public utility consists of the amount of revenue remaining after deduction of necessary and reasonable operating expenses, rents, taxes, and depreciation and amortization accruals, but before provision for interest, dividends, or additions to corporate surplus. This "return" is ordinarily conceived of as the product of a "rate base" times a given "rate of return." Conversely, the "rate of return" may be defined as that percentage rate which, when applied to the rate base, will yield the total, over-all return for the particular utility.

*Statement of Principles.*

It is generally conceded that the basic principles to be considered in determining the reasonableness of a particular rate of return were stated by the Supreme Court in the general rule laid down in the Bluefield decision as follows:

"What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all
5 relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no right to profits such as are realized or

[1] Pages 1 to 3 and Appendix pages 1 to 51 omitted.

anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

Another fundamental principle was stated by the Supreme Court in United Railways *v.* West in the following words: "What will constitute a fair return in a given case is not capable of exact mathematical demonstration."

Although other factors doubtless have been considered by various courts and commissions, the underlying principles to be considered in connection with the problem of rate of return are probably nearly all covered in the above citations from holdings of the Supreme Court.

*Method of Presentation of Data.*

Based on consideration of the underlying principles set forth above, I have made certain studies and have prepared this written statement, which constitutes Volume I of this exhibit, and have prepared or directed and supervised the preparation of certain charts and schedules which have been assembled in two bound volumes constituting Volumes II and III of this exhibit.

Volume II of this exhibit contains data on general interest rates and yields, utility interest rates and yields, and recent financing, general economic conditions, comparative stability of earnings of public utilities and other forms of enterprise, local conditions in the general area of ultimate consumption of natural gas supplied through the facilities of the company involved in the present proceedings, and data reflecting the present situation with respect to idle investment funds and the factors contributing thereto. Volume III of this exhibit contains general statistics pertaining to the natural gas industry and, in addition, presents facts concerning the ownership, issuance, prices and yields of securities of natural gas companies.

As above indicated, the data in Volumes II and III of this exhibit are presented through the medium of charts and schedules. In order to facilitate the reading of the charts, the charts

are accompanied by schedules which contain the data on which the charts are based. For example, where a schedule number appears on the same line as a chart number in the Table of Contents, the schedule and chart should be read in conjunction with one another. In certain instances a schedule number appears without a related chart number, in which case the schedule should be read alone.

7 STATEMENT ON VOLUME II OF EXHIBIT

From the Table of Contents of Volume II of this exhibit, it will be seen that the charts and schedules contained therein are arranged in several groups or sections. These sections, in the order of their appearance, are as follows:

1. General Interest Rates and Yields; which relates to yields on investments in bonds of domestic corporations and Treasury bonds, and interest rates on 4–6 months commercial paper and 60–90 day time loans.

2. Utility Interest Rates and Yields and Recent Financing; pertaining to interest rates and yields on utility securities and containing information on recent financing by public utilities in general and, in addition, data compiled separately covering new financing by electric utilities during the period from 1935 through February 1941.

3. Economic Conditions; which gives a general picture of economic conditions both currently and for the period since 1920 as indicated by indexes of wholesale commodity prices, general business activity and, for the period since 1929, data on national income.

4. Comparative Risk; this section giving an indication of the relative risks of public utilities as compared with other forms of enterprise.

5. Local Conditions; containing data on rediscount rates of the various Federal Reserve Banks, and averages of rates charged customers by banks in principal cities of the country. This section also contains data comparing economic conditions throughout the Nation in recent years with those in the States of Ohio, Pennsylvania, and West Virginia, and contiguous territory.

6. Idle Money Factors; which relates to the present situation respecting the volume of idle investment funds and the factors contributing to the growth of such funds in recent years.

*General Interest Rates and Yields.*

Moody's Investors Service publishes a considerable amount of financial data and its publications are accepted and relied upon generally for purposes such as are now being considered.

8 Chart 1 shows Moody's composite bond yield average based on 120 domestic corporation bonds which carry the four highest bond ratings assigned by Moody's publication. The chart also shows the average yield for the 30 bonds included in each of the four rating groups, namely: Aaa, Aa, A, and Baa. There are not always 120 bonds in Moody's compliation for reasons which will be explained below.

*Chart 1.*—Chart 1 reflects the range of bond yield averages since 1920. The composite average yield for all bonds included in the data had reached by the end of the 1936 the lowest level recorded since 1920, namely, 3.67%. After rising during 1937 and the early part of 1938 to 4.50% in April 1938, a decline took place which by August 1939 had carried the composite average down to the 1936 low point. The month of September 1939 witnessed a sharp rise resulting from the outbreak of war in Europe. The composite average moved from 3.67% to 3.95% in that month. Between September 1939 and the year-end, the average declined to the August level. Except for the rise which occurred in May 1940 following the invasion of the Low Countries, the year 1940 witnessed a continuous decline in the composite average, the yield reaching a record low point of 3.36% at the year-end. In February 1941 the yield rose slightly to 3.40% and stood at 3.39% in March and was 3.40% on April 18, 1941, the latter two figures not being shown on the chart.

Since Chart 1 shows the individual rating group averages from which the composite average is derived, it can be seen that by December 1940 the average yields for bonds of Aaa, Aa, and A rating, after advancing about 0.10% in May and June, had also declined to record low levels, these being considerably

9 lower than the levels established in 1936. For example the low points in 1936 as compared with the yields shown for December 1940, are as follows: Aaa bonds, 1936, 3.10%, December 1940, 2.71%; Aa bonds, 1936, 3.28%, December 1940, 2.82%; A bonds, 1936, 3.78%, December 1940, 3.36%. The first two months of 1941 witnessed moderate rises in yields on Aaa and Aa bonds, continuing into March and April, the yield on April 18, 1941 being 2.83% on Aaa bonds and 3.03% on Aa bonds, with little change occurring in yield on A bonds.

The risk factor associated with bonds of Baa rating is reflected by the more pronounced rise in the average yield on such bonds commencing in the latter part of 1937 and culminating in the early part of 1938 than was the case with respect to bonds of higher rating. The 1936 low point for Baa bonds was 4.52%, the yield subsequently rising to 5.16% in September 1937 and to 6.47% in April 1938. The yield declined rapidly during the remainder of 1938 to 5.27% in December 1938. During 1939 the average yield on Baa bonds declined still further but in December 1939, at 4.92%, was still 0.40% above the 1936 low point, in contrast with the experience of bonds of higher grade. The average yield on Baa bonds continued to decline during the first four months of 1940, but in May increased sharply by 0.20% and in June advanced 0.17%, resulting in a rise of 0.37% over the April average. This rise compares with that of about 0.10% in the average yield for the higher grade bonds in the same two-months period. From June to December 1940 the Baa average yield reflected a much more substantial decline than was recorded for higher grade bonds with the result that the December average of 4.45% was 0.07% below the 1936 low point, a decline of 0.47% from the average for December 1939. In January 1941 the Baa average declined still further to 4.38% and, following a slight increase in February, stood at 4.31% on April 4 and 4.35% on April 18, 1941. The latter figure is 0.10% lower than that for December 1940 in contrast with the moderate increase in 1941 above noted with respect to yields on Aaa and Aa bonds.

Inspection of Chart 1 will reveal the virtual collapse of the bond market which occurred in 1931 and the continuation of an extreme degree of weakness thereafter for the greater part of three years. In this period bonds most severely affected were those regarded as subject to greater investor risk. It will be observed, for example, that while the yields for Baa and A bonds reached 11.63% and 8.5%, respectively, in this period, the highest yield recorded for Aa bonds was 6.60% and for Aaa bonds was only 5.41%.

The data upon which Chart 1 is based appear in Schedule 1 which will be found immediately following the chart. Page 1 of Schedule 1 contains the composite monthly and annual average yields for each year commencing with the year 1920 on 120 domestic corporation bonds, including bonds of the four highest Moody bond rating groups, namely: Aaa, Aa, A, and Baa. Simi-

larly, Page 2 contains the average yield on bonds of Aaa rating, Page 3 on bonds of Aa rating, Page 4 on bonds of A rating and Page 5 on bonds of Baa rating. Each rating group includes, so far as they are available for inclusion, 30 domestic corporation bonds. A footnote on Page 5 indicates the source from which the data were taken. The lines on the chart can be readily associated with the data contained in the schedule. For example, Page 3 of Schedule 1 shows that the yield on
11 30 domestic corporation bonds of Aa rating was 3.00% in February 1941, as reflected on Chart 1.

Page 6 of Schedule 1 describes the methematical basis of the yield computations. Monthly yield averages are unweighted arithmetic averages of daily yields computed on the basis of closing prices and calculated to maturity dates. For each rating group the average is based on the bonds included in that group and the composite average is the average of the four rating group averages. Commencing on Page 6 and continuing on Page 7 of Schedule 1 will be found the key to Moody's bond ratings. For example, bonds of Aaa rating are those judged as representing bonds of the best quality, generally referred to as "gilt edge" because they carry the smallest degree of investment risk. Such bonds are characterized by security of principal, and interest payments thereon are protected by large or exceptionally stable margins, changes in which are most unlikely to impair the fundamentally strong position of such issues. Bonds of Aa rating rank high but lack one characteristic or another of the highest type of bond investment. Together with the Aaa group they comprise what are generally known as high-grade bonds. Bonds carrying the A rating possess many favorable investment attributes and are to be considered as higher medium grade obligations. Baa bonds are those considered as lower medium grade obligations, i. e., they are neither highly protected nor poorly secured; such bonds, besides lacking outstanding investment characteristics, in fact exhibit speculative characteristics as well.

Pages 8 to 11, inclusive, of Schedule 1 contain lists of the bonds currently used in Moody's bond yield averages ac-
12 cording to rating groups. Aaa bonds, grouped according to classification as Industrials, Railroads, and Public Utilities, are listed on Page 8. Aa bonds are similarly listed on Page 9. A bonds on Page 10 and Baa bonds on Page 11. It will be noted that the lists of Industrial Aaa, Aa and A bonds contain fewer than ten bonds, there being only four bonds in the Aaa group, three in the Aa group, and nine in the A group. Similarly, there

are only five Railroad bonds in the Aaa group and eight in the Aa group. Moody's explanation, as given on Page 6 of Schedule 1, is that it has not been possible since 1933 to find a sufficient number of representative bonds for these rating groups. However, as previously indicated, the averages for these groups are given equal weighting in combining them with other group averages.

*Chart 2.*—The purpose of the next two charts is to show that the trend of bond yields is not an isolated phenomenon but is part of the movement of interest rates in general, as indicated by the broadly similar patterns observed in the trend of interest rates on 4-6 months commercial paper and on 60-90 day time loans, as well as in the yields on U. S. Treasury bonds. In other words, the purpose of these two charts is merely to furnish added data regarding the movement of interest rates as such, and not to offer short-term money rates or yields on Treasury Bonds as a measure of a proper rate of return.

Chart 2 shows interest rates on 4-6 months commercial paper and 60-90 day time loans and is based on averages computed by Standard Statistics Company from data appearing in the Commercial and Financial Chronicle. The 4-6 months paper is issued by such seasonal borrowers as Armour's and Swift's and is sold to banks through dealers. The 60-90 day time loans
13 represent bank loans to New York Stock Exchange brokers and are secured by mixed collateral. Although the 4-6 months paper, contrary to expectation, currently carries a lower rate than the shorter-term time loans, there are two factors which may be assumed to effect a higher rate for 60-90 day loans than for 4-6 months paper. These are, first, that the rate for 60-90 day loans is assumed to be more or less fixed by agreement between banks and, second, that a service charge element is presumed to exist by reason of the allowance of substitutions of collateral in connection with brokers' loans.

Current interest rates on both types of loans are extremely low as compared with the levels existing during the period 1920 to 1929. For example, by reference to Schedule 2 it may be seen that the rate on 60-90 day time loans varied from 8.72% in 1920 to as low as 2.52% in 1924 and rose to 8.94% in 1929. The average for that ten-year period was 5.46%, as compared with 1.43% for the eleven years following 1929. The rate on 60-90 day time loans now stands at 1.25%, but for a brief period was 0.50% in 1932 and 0.25% in 1935.

On 4–6 months commercial paper, the average rate for the ten-year period 1920–1929 was 5.01%, while since 1929 the rate has averaged 1.54%. The rate on this type of paper remained unchanged at 0.75% from November 1938 through January 1940, but in March 1940 declined to 0.63%. Since the latter date the rate has remained unchanged.

*Chart 3.*—Chart 3 shows the yield on U. S. Treasury Bonds due or callable after twelve years, as computed by the U. S. Treasury Department for the period since 1920. This chart portrays
14 a somewhat similar situation as that shown on Charts 1 and 2, the trend being generally downward in recent years. The low point for the period 1920–1937 was reached in February 1937 with a yield of 2.46%, as indicated in Schedule 3. Increasing by April 1937 to 2.80%, the yield subsequently declined, reaching a new low of 2.13% in June 1939. In September 1939, as in the case of domestic corporation bonds, the yield on U. S. Treasury Bonds rose to the highest level of the year, 2.65%, but subsequently declined and for the month of December 1939 was 2.35%. The decline continued in 1940 and in March and April the yield average 2.25%. An increase of 0.13% occurred in May 1940, in line with the increase previously noted for corporate bonds in the Aaa, Aa, and A groups, but subsequently this increase was more than cancelled, a decline of 0.50% taking place between June 1940 and the year-end when the yield stood at 1.89%, the lowest figure on record. An abrupt rise in yield occurred in January 1941, the last month shown on the chart. This rise continued, resulting in an average of 2.10% for the following month. However, in March the yield declined to 2.01% and for the week ended April 26, 1941, at 1.91%, was very close to the record low point of 1.89%.

Undoubtedly the lower yield reflected for Treasury bonds in comparison with Moody's average yield on corporation bonds of Aaa rating may be attributed to the low risk associated with these securities and to the fact that income derived therefrom is in part exempt from taxation.

From the data presented in this section, it is apparent that bond yields and interest rates generally, have reached the lowest levels witnessed in many years; in fact, they probably have not been lower at any time in the history of the country.

15 *Utility Interest Rates and Yields and Recent Financing.*

This section deals with the cost of money as indicated by bond yields, preferred stock yields, and common stock earnings-price ratios, with particular reference to public utilities.

*Chart 4.*—Chart 4 shows Moody's bond yield averages commencing with the year 1934, based on 40 public utility bonds according to Moody's bond ratings. Comparison of Chart 4 with Chart 1 reveals that yields on public utility bonds have followed the same generally downward trend in recent years reflected by yields on 120 domestic corporation bonds (Industrials, Railroads, and Public Utilities). It will also be observed that public utility bond yields were at the lowest levels on record at the close of 1940.

It is of interest to note from inspection of the annual averages shown on Pages 1 and 2 of Schedule 4, which immediately follows Chart 4, that the average yield on public utility bonds in each rating group declined substantially between 1934 and 1940, the comparative yields and declines being as follows:

| Rating | 1934 average | 1940 average | Decline since 1934 |
|---|---|---|---|
| | *Percent* | *Percent* | *Percent* |
| Aaa | 3.92 | 2.77 | 1.15 |
| Aa | 4.66 | 2.92 | 1.74 |
| A | 5.55 | 3.24 | 2.31 |
| Baa | 7.49 | 4.05 | 3.44 |

Relatively, these declines range from 29.3% for Aaa bonds to 45.9% for Baa bonds, indicating that investors in public utility bonds have more recently been willing to accept a relatively lower rate of compensation than in 1934 in proportion to the degree of risk assumed.

16 Another method of measuring the willingness of investors in public utility bonds to accept relatively less compensation in proportion to the degree of risk assumed is to compare the ratio of the yield on Baa bonds to that on Aaa bonds. Such ratios computed for the years 1934 to 1940, inclusive, and for the month of February 1941 are as follows:

| Period | Baa yield | Aaa yield | Ratio of Baa to Aaa yield |
|---|---|---|---|
| | *Percent* | *Percent* | *Percent* |
| Year 1934 | 7.49 | 3.92 | 1.91 |
| Year 1935 | 5.56 | 3.52 | 1.58 |
| Year 1936 | 4.87 | 3.21 | 1.45 |
| Year 1937 | 5.09 | 3.21 | 1.59 |
| Year 1939 | 4.80 | 2.77 | 1.73 |
| Year 1940 | 4.05 | 2.76 | 1.46 |
| Feb. 1941 | 3.99 | 2.76 | 1.44 |

From the foregoing, it appears that in 1934 the yield demanded by investors on Baa bonds was 1.91 times that required on Aaa bonds. The ratio declined to 1.45 in 1936, increased to 1.74 in 1938, and dropped back to 1.56 in 1939. In 1940 the ratio stood at 1.46 and in February 1941 was 1.41, or somewhat below the previous low level for the period established in 1936.

The 1941 curves on Chart 4 reflect increases in yields on all classes of public utility bonds in January and February, such increases being particularly noticeable with respect to bonds in the two lower rating groups, namely, A and Baa. However, figures for March and April 1941, not shown on the chart, indicate that such increases have not continued, the yields on April 4, 10, and 18, 1941, compared with those for the month of February, being as follows:

| Rating | Month of February | Apr. 4, 1941 | Apr. 10, 1941 | Apr. 18, 1941 |
|---|---|---|---|---|
| | *Percent* | *Percent* | *Percent* | *Percent* |
| Aaa | 2.76 | 2.75 | 2.76 | 2.75 |
| Aa | 2.88 | 2.90 | 2.91 | 2.86 |
| A | 3.20 | 3.15 | 3.15 | 3.13 |
| Baa | 3.90 | 3.86 | 3.88 | 3.89 |

*Chart 5.*—Chart 5 shows Moody's bond yield averages for the period since 1920 based on 120 domestic corporation bonds representative of three industry groups, namely: Railroads, Public Utilities, and Industrials. The general trends reflected in this chart are similar to those described in connection with the previous charts. Starting from the low point for all groups reached in 1936, the average yields increased until midyear of 1938. The rise in yield for railroad bonds in this period was much more abrupt than in the case of public utilities and industrials and carried the yield on railroad bonds to 5.75%, public utility yields increasing only to 4.11% and industrials to 3.55%. From these points the trend toward lower yields has continued with minor interruptions for all groups, but only in the case of public utilities and industrials have the yields established new low levels. For example, the August 1939 figures were 3.40% (1936—3.69%) for public utilities and 3.21% (1936—3.37%) for industrials. Railroad yields in August averaged 4.41%, which was still considerably higher than the 3.95% yield recorded for January 1937, reflecting the greater degree of risk attaching to railroad securities from the viewpoint of investors. The rise in yields which oc-

carred in September 1939 had been cancelled before the year-end, and subsequently through April 1940 all yields registered further declines, public utility and industrial bond yields falling to the then lowest levels on record, while railroad bond yields still remained 0.38% above the January 1937 low point.

In May and June, following the invasion of the Low Countries, an abrupt rise in yields of all bonds occurred, but this rise was subsequently cancelled, railroad bond yields declining through January 1941 to 3.96%, or within a fraction of the lowest level recorded since 1920, while public utility and industrial bond yields had receded to all-time lows at the close of 1940. The December 1940 averages, as shown in Schedule 5, Pages 1, 2, and 3, were as follows: Industrials 2.93%; Public Utilities 3.13%; and Railroads 4.03% (January 1941, 3.96%). The most recent yields available at the present writing, those of April 18, 1941, show moderate changes compared with year-end averages, as follows: Industrials 3.06%; Public Utilities 3.16%; and Railroads 3.97%.

By inspection of the annual averages shown on Page 2 of Schedule 5, it will be seen that the average yield on 40 public utility bonds declined from 6.30% in 1932 to 4.43% in 1935, and leveled off at approximately 3.90% during the years 1936, 1937, and 1938. In 1939 the average was lower, at 3.48%, than for any year since 1920, while the average for 1940, 3.25%, was well below that for 1939.

Chart 5 indicates that since 1933 the experience of the industrial group has been somewhat more favorable than that of the public utility group, but this is probably due in part to the limited number of industrial bond issues available for inclusion in the two highest Moody bond rating groups.

*Chart 6.*—Chart 6 shows annually, for the period since 1921, Moody's weighted averages of yields on newly issued domestic bonds of industrials, railroads, and utilities. The averages shown are based on yields on newly issued bonds, calculated to maturity and weighted by the amounts of all new issues floated in any given classification or period. The classification "utility bonds," which includes bonds of light, power, and gas utilities, consists wholly of operating companies. The yields indicated in Chart 6 are not, of course, representative of bonds of the same companies or issues at any one date or during any given period.

The chart shows a generally downward trend since 1921 for all classes of companies in yields on newly issued bonds. The trend was interrupted in 1929 and 1932, but commencing in 1933 and continuing until about 1936 the downward trend was greatly accelerated. In 1937 and 1938 the yields leveled off somewhat, but in 1939 a substantial decline occurred, particularly in yields on new railroad and industrial bond issues. The 1939 decline in yield on newly issued light, power, and gas utility bonds was fractional, but nevertheless brought that yield also to the lowest point reached throughout the entire period since 1921. There has been superimposed on Chart 6 from Schedule 10 the average yield on newly issued bonds of electric operating utilities beginning with the year 1935, which shows a somewhat more favorable market for bonds of electric operating utilities than those of light, power, and gas utilities combined.

The chart indicates that from 1921 through 1932 the market for new utility bonds appears to have been somewhat less favorable than for railroad bonds. In 1933, however, this position was reversed and except in the years 1937 and 1938, utility bonds were marketed from 1933 through 1939 on more favorable terms than railroad bonds. It also appears that from 1921 through 1938 the market for new utility bond issues was consistently more favorable than for industrial issues. A reversal of this situation occurred in 1939 when the average yield on new utility bond issues was 3.45%, as compared with 3.09% on new industrial issues. In this connection, however, attention is directed to Page 1 of Schedule 10 where it is indicated that in 1939 a substantially larger proportion of electric operating utility bond issues consisted of lower medium grade bonds of Baa rating than was the case in prior years, which would appear to account, at least in part, for the failure of the yield on new utility bond issues to follow the yield on industrial issues in that year.

The rapid decline in the yield on newly issued domestic bonds, particularly noticeable since 1934, suggested that the decline could be attributed not only to the course of the bond market itself but also to the quality of the offerings. This assumption is confirmed by comparison of the average yield for newly issued utility bonds with the average yield on utility bonds then outstanding of the three highest Moody bond rating groups, i.e., Aaa, Aa, and A. The line superimposed on Chart 6, showing the average annual yield from 1934 to 1939 on 39 utility bonds carrying these Moody ratings, very closely conforms to that showing the

yield on newly issued utility bonds, except in 1939 for the reason above noted, and indicates that a very large proportion of the utility bonds offered during that period consisted of higher grade bonds.

Before proceeding to a discussion of Schedule 7 and subsequent schedules which contain certain data with respect to yields on securities of electric operating utilities, it would be desir-
21 able to point out that such data are not intended to serve as criteria of market conditions directly affecting the securities of natural gas companies; nevertheless, because of the prominent position of both the natural gas and electric utility industries as important components of the nation's public utility industry and because both industries have exhibited a marked rapidity of growth in recent years, it is believed that the presentation of data with respect to yields on securities of electric operating utilities will afford a perspective which will be of assistance in connection with a study of yields on securities of natural gas companies.

The following data with respect to the natural gas and electric utility industries, derived respectively, from "Annual Statistics of the Natural Gas Industry in 1939, Statistical Bulletin No. 41, October, 1940," issued by the American Gas Association, and "The Eectric Light and Power Industry in the United States, Year 1939, Publication No. H 2, March 1940," issued by the Edison Electric Institute, clearly demonstrate the magnitude of the growth experienced by both industries since 1929:

NATURAL GAS INDUSTRY

| Particulars | Year 1939 | Year 1929 | Increase since 1929 | |
|---|---|---|---|---|
| | | | Amount | Percent |
| Number of customers | 7,434,000 | 5,896,000 | 1,538,000 | 26.4 |
| M. C. F. sales [1] | 1,328,243 | 991,036 | 337,207 | 34.0 |
| Revenues [1] | $448,859 | $376,250 | $72,609 | 19.3 |

ELECTRIC UTILITY INDUSTRY

| | | | | |
|---|---|---|---|---|
| Number of customers | 29,104,185 | 24,150,183 | 4,954,002 | 20.5 |
| Kwh. sales [1] | 106,086,983 | 75,294,467 | 30,792,516 | 40.9 |
| Revenues [1] | $2,293,644 | $1,938,520 | $355,124 | 18.3 |

[1] Thousands (000) omitted.

22 It may also be noted that the two industries exhibit a certain similarity in the proportion of revenues derived

from domestic and commercial customers on the one hand and from industrial customers on the other, as indicated in the following comparison of revenues from sales to customers in 1939 by customer groups:

NATURAL GAS INDUSTRY

| Particulars | Domestic | Commercial | Industrial | Total |
|---|---|---|---|---|
| Revenues [1] | [2] $255,805 | [3] $50,362 | [3] [4] $142,692 | $448,859 |
| Percent of total | 57.0% | 11.2% | 31.8% | 100.0% |

ELECTRIC UTILITY INDUSTRY

| | | | | |
|---|---|---|---|---|
| Revenues [1] | [5] $889,584 | [5] $647,671 | [6] $756,389 | $2,293,644 |
| Percent of total | 38.8% | 28.2% | 33.0% | 100.0% |

[1] Thousands (000) omitted.
[2] Includes house heating.
[3] Includes gas sold to electric utilities but excludes gas sold in the field and to carbon black manufacturers.
[4] Includes farm customers.
[5] Small light and power.
[6] Large light and power and all other.

The above summary discloses that approximately one-third of all operating revenues of both the natural gas and electric utility industries is derived from industrial customers, the remaining two-thirds representing revenues from domestic and commercial customers. In the latter category, however, it will be noted that 57% of natural gas revenues are derived from domestic (including house heating) customers, as compared with 38.8% in the case of electric revenues, the proportion of revenues from commercial customers being 11.2% for the natural gas industry and 28.2% for the electric utility industry.

*Schedule 7.*—This schedule reflects annual yields on a group of electric operating utility preferred stocks during the period of twelve years from 1920 to 1940, inclusive, based on averages of yearly high and low market quotations. The 16 issues included in this exhibit comprise all electric operating utility preferred stocks shown in Schedule 19 of a Federal Communications Commission publication issued June 15, 1938, for which preferred dividends and prior requirements were earned in excess of 1.50 times in 1938, and for which market quotations for each year in the period 1929–1940 were available. The title of the publication referred to is "The Problem of the 'Rate of Return' in Public Utility Regulation".

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Schedule 7 reflects an upward trend through 1933 in yields demanded by investors on preferred stocks, and a downward trend in the years 1934, 1935 and 1936. After 1936 investors' demands fluctuated within a narrow range at approximately the 1936 level. Expressed in terms of an index based on the 1929 average of the yields on the 16 preferred stocks as equal to 100%, the average yield advanced to 106 in 1931, to 117 in 1932, and to 140 in 1933. The average declined to 125 in 1934 and to 103 in 1935. The average in 1936 was about 15 points lower at 88 and, with minor fluctuations in the years 1937, 1938 and 1939, stood at 85.5 in 1940.

Expressed in terms of percent yield, the unweighted arithmetic average yield on the 16 preferred stocks increased from 5.74% to 8.04% between 1929 and 1933, declined to 5.10% between 1933 and 1936, and was 5.19% for 1937, 5.27% for 1938, 4.96% for 1939 and 4.91% for 1940.

*Schedule 7-A.*—This schedule reflects yields on electric operating utility preferred stocks and number of times preferred dividends and prior requirements are earned based on averages of high and low market quotations for the first two months of 1941, with earnings coverage based on income for the latest twelve months for which reported. Schedule 7-A contains a list of 21 preferred stocks and, as indicated in the footnote, includes all presently outstanding electric operating utility preferred stocks shown in Schedule 19 of the previously mentioned publication of the Federal Communications Commission, for which preferred dividends and prior requirements were earned in excess of 1.50 times in 1938.

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Examination of this schedule will show that of the 21 preferred stocks listed, three issues were selling to yield from 3.81% to 4.00% to investors, two issues to yield between 4.00% and 4.25%, six issues to yield between 4.25% and 4.50%, three issues to yield from 4.50% to 5.00%, four issues to yield between 5.00% and 5.50%, and three issues to yield 5.66%, 6.05% and 6.07%, respectively. In no instance did any issue sell on a basis to yield in excess of 6.07%. Eleven of the twenty-one issues reflected yields of 4.50% or lower on the basis indicated. With respect to nine of these eleven issues, preferred dividends and prior requirements were earned 2.20 times or more, and with respect to six of the ten issues yielding in excess of 4.50% such requirements were earned less than two times.

The unweighted arithmetic average of yields on the 21 preferred stock issues shown in Schedule 7-A is 4.72%, as compared with the 1940 average of 4.91% for the 16 issues shown in Schedule

7. The two-months' average of 4.81% for the 16 issues in Schedule 7 which are also included in Schedule 7–A reflects a continuation in 1941 of a downward tendency in electric operating utility preferred stock yields.

*Schedule 8.*—This schedule reflects annual earnings-price
25 ratios, that is, the percent of net earnings per share to market price, on a group of electric operating utility common stocks during the period of twelve years from 1929 to 1940, inclusive, based on averages of yearly high and low market quotations and published annual earnings per share of common stock. The issues included in the exhibit comprise all electric operating utility common stocks shown in Schedule 26 of the previously mentioned publication of the Federal Communications Commission issued June 15, 1938. The stocks listed from such publication include only those common stocks which are held by the public to the extent of at least 5 percent of the number of shares outstanding.

Schedule 8 reveals that, on the average, from 1929 through 1932 there was an upward trend in common stock earnings-price ratios on these common stocks. In other words, during this period, investors demanded that increasing earnings be available for common stock per dollar of market price. In terms of an unweighted arithmetic average, the average earnings-price ratio for the group of 14 common stocks was 4.06% in 1929, and increased in the three succeeding years, rising to 4.59% in 1930, to 5.95% in 1931, and to 7.74% in 1932, the latter ratio being the highest reflected in any year during the twelve-year period.

In 1933, investors' demands abated somewhat, the average earnings-price ratio declining to 7.02%. In 1934 the ratio rose to 7.57%, but declined to 7.32% in 1935, and to 5.89% in 1936. In 1937 and 1938 the ratio advanced to 6.77% and 7.42%, respectively, but declined to 7.04% in 1939. The ratio rose 0.26% to 7.30% in 1940.

It will be observed that during the twelve-year period
26 the average did not exceed eight percent in any year. Aside from the two years 1929 and 1930 in which the average was less than five percent, there were two years in which the average was less than six percent; one year, 1937, in which it was 6.77%; and seven years in which the average was above seven percent. The highest average, as above stated, was 7.74% in 1932.

*Schedule 8–A.*—This schedule reflects earnings-price ratios of 14 electric operating utility common stocks and the percent of gross income available for common stock based on averages of

high and low market quotations for the first two months of 1941, and on earnings per share for the twelve months ended December 31, 1940. The common stocks listed in Schedule 8-A are the same issues for which earnings-price ratios for the period 1929–1940 are presented in Schedule 8.

Inspection of data contained in this schedule will show that the earnings-price ratios of the 14 common stocks listed were as follows: one at 5.34%; three from 6.00% to 7.00%; five from 7.00% to 8.00%; two at slightly over 8.50%; one at 9.69%; one at 9.83%; and one at 10.14%. Nine of the fourteen issues reflected earnings-price ratios of 8.00% or less on the basis indicated. It will be noted that for three of the five issues selling on a basis in excess of 8.00% the proportion of gross income available for common stock falls below 50%.

The unweighted arithmetic average of the earnings-price ratios of the fourteen common stock issues shown in Schedule 8-A is 7.88%, as compared with the 1939 average of 7.04% and the 1940 average of 7.30% for the same issues shown in Schedule 8. It will be noted that the 1941 average of 7.88% is 0.14% higher than the highest average (7.74% in 1932) reflected for the period 1929–1940.

*Schedule 9.*—Schedule 9 presents annual information on the volume of all corporate financing in the United States since 1934, and the portion thereof representing financing by public utilities, as compiled by The Commercial & Financial Chronicle. The total volume of financing in each year is segregated to show the portions representing new capital and refunding issues, and subdivisions of the amounts representing new capital, refunding and total corporate financing disclose the proportionate amounts of long-term bonds and notes, short-term bonds and notes, preferred stock and common stock issues comprising the total, both for all corporate issues in the United States and for the portion thereof representing security issues of public utilities.

The total amount of new corporate issues in the United States in 1934 was 491 million dollars, in 1935—2,267 millions, in 1936—32 millions, in 1937—2,434 millions, in 1938—2,140 millions, in 1939—2,196 millions, in 1940—2,721 millions, and in the first two months of 1941—587 millions, the total for the entire period being 17,468 millions. Of this total, 8,539 millions, or 48.9%, represented financing by public utilities. By years the proportions of all public utility security issues to all corporate issues

in the United States were as follows: 1934—32.3%, 1935—56.6%, 1936—45.9%, 1937—34.0%, 1938—57.1%, 1939—60.4%, 1940—46.4%, and 1941 through February—56.4%.

In this connection, attention is directed to Note 3 on Page 4 of Schedule 9 which indicates that The Commercial and Financial Chronicle, which is the source of the above data on corporate financing, does not classify nonretailing producers of natural gas and natural gas pipe-line companies as public utilities. Securities issued by such natural gas companies are reported by that publication under the heading "Miscellaneous." However, it is noted that the common stock issue of Southern Natural Gas Company offered to stockholders in January 1941 was classified by the above publication as a public utility issue, although that company is not engaged in the retail distribution of natural gas. The amount of the offering, exclusive of shares subscribed by Federal Water Service Corporation, parent company, was $2,310,070 (reflected under "New Capital" on Page 6 of Schedule 9).

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The proportion of the total amount of all corporate financing during the period from 1934 through February 1941 represented by new capital was 29.1%. New Capital accounted for 12.0% of all public utility financing and 45.5% of all nonutility financing during the same period. By new capital, in this connection, is meant capital obtained for the purpose of additions to plant and property or to increase working capital. By refunding is meant the issuance of new securities for the purpose of retiring existing obligations at or before maturity, or of affecting reductions in dividend rates on preferred stocks.

New capital raised by corporations in the United States during the period from 1934 through February 1941 aggregated 5,067 million dollars of which public utility issues accounted for 1,028 millions, or 20.2%. of the 1,028 millions of new capital raised by public utilities, 94.7% was represented by bonds and notes, 4.2% by preferred stocks, and 1.1% by common stocks, whereas the corresponding percentages of new capital raised by all nonutility corporations in the United States were as follows: for bonds and notes—72.1%; for preferred stocks—11.4%; and for common stocks—16.5%.

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The total amount of all corporate issues for refunding purposes during the same period was 12,381 million dollars, of which public utility issues accounted for 7,511 millions, or 60.7%. This clearly demonstrates that public utilities have taken advantage of

the favorable market in recent years to conduct large-scale refunding operations.

Public utility financing during the period since 1934 accounted for the following proportions of all corporate issues: long-term bonds and notes, maturing later than five years from date of issue—7,869 millions, or 53.3% of all long-term corporate issues; short-term bonds and notes—160 millions, or 31.5% of all short-term corporate issues; preferred stocks—487 millions, or 35.0% of all preferred stock issues; and common stocks—23 millions, or 2.9% of all common stock issues. As previously stated, public utility issues of all kinds accounted for 48.9% of all corporate issues over the entire period under discussion. However, during the years 1938 and 1939 public utility financing accounted for very nearly 60% of all corporate financing in the United States and, although the proportion dropped to 46.4% in 1940, it rose to 56.4% in the first two months of 1941.

Analysis of the various types of securities issued by public utilities during the period covered by Schedule 9 reveals that there were no capital stock issues sold in 1934. Small amounts of preferred and common stock representing new capital were sold in 1935, approximately $4,500,000 of preferred stock issues representing new capital were sold in 1936, and approximately $5,700,000 of preferred stock issues and $700,000 of common stock issues representing new capital were sold in 1937. No common stock issues were sold in 1938 and the amount raised from the sale of common stock in 1939 was only $300,000, although preferred stock issues for new capital amounting to approximately $5,100,000 were sold in both years.

In contrast with this record, Schedule 9 reflects the sale by public utilities for new capital purposes of $6,600,000 of common stock and $21,300,000 of preferred stock in the year 1940 and $2,300,000 of common stock and $109,000 of preferred stock in the first two months of 1941. The combined total of such issues in 1940 and 1941 is somewhat in excess of the aggregate of all utility preferred and common stock issues for new capital purposes in the entire preceding six-year period.

*Schedule 10.*—This schedule contains a summary of all known electric operating utility bond issues, other than bonds and debentures having serial maturities, sold during the years 1935 to 1940, inclusive, and shows that during this period 327 such bond issues were sold aggregating in excess of five billion dollars. The sum-

mary on Page 1 is presented by years and discloses the following weighted average yields on newly issued electric operating utility bonds based on offering prices to purchasers: 1935—3.81%; 1936—3.48%, 1937—3.63%, 1938—3.43%, 1939—3.42%, and 1940—3.06%. The weighted average yield on all issues sold during the six-year period, irrespective of rating, was 3.47%.

Page 2 of Schedule 10 reflects average yields on the same bond issue classified according to ratings assigned by Moody's
31 publications. It will be seen that issues aggregating 4.2 billions, or 78.5% of the principal amount of all issues sold during the six-year period, represented bonds of Aaa, Aa and A rating, and issues aggregating only 352 millions, or 6.5% of the total, represented bonds of Baa rating. It thus appears that the major portion of electric operating utility bonds issues sold in the period 1935–1940 consisted of high and medium higher grade bonds.

The summary on Page 2 of Schedule 10 also discloses that average yields to purchasers have declined since 1936. With respect to bonds carrying the four highest Moody's ratings, yields on issues sold in 1940 were lower than in any other year of the six-year period, such yields being as follows: Aaa—2.64%; Aa—2.80%; A—3.07%; and Baa—3.81%.

Of the 327 issues included in the summary for the six-year period, 98 were issues to which no rating was assigned by Moody's publications. The majority of such issues represent bonds which were privately sold. No rating is ordinarily assigned to bonds which are sold privately inasmuch as there is usually no trading in such issues.

*Schedule 10–A.*—This schedule contains certain details in connection with offerings of electric operating utility bond issues sold during the year 1940. Such offerings aggregated approximately $800,000,000 in principal amount. The weighted average yield to purchasers of these issues was 3.06%. The schedule shows, for each issue, the name of the issuing company, month of offering, description of issue, principal amount of offering, price to public, and yield to maturity.

*Schedule 10–B.*—Schedule 10–B contains a list of all electric operating utility bond issues sold during the first two
32 months of 1941, and presents similar information with respect to such issues as that described above in connection with Schedule 10–A. The aggregate principal amount of the issues sold in the two-months' period was $157,991,000. There

were 10 issues sold during this period, including one Aaa issue sold in January on a 2.60% yield basis and two A issues sold to yield an average of 2.96%. Seven issues, to which no rating was assigned, were sold in this period, all of which were sold privately. The weighted average yield on all issues sold was 3.17%.

*Schedule 11.*—Schedule 11 presents a compilation of all known preferred stock issues of electric operating utility companies sold in the period 1935–1940, showing the cost of money to issuing companies and yields to purchasers. The average yield to purchasers of such issues was 4.38% for 1935, 4.62% for 1936, 4.63% for 1937, 4.85% for 1938, 4.99% for 1939, and 4.36% for 1940. Yields on individual issues in excess of $1,000,000 ranged from 3.85% to 5.95%. For the entire period, the average yield on all issues sold was 4.58%.

Comparison with Schedule 10 indicates the relatively low proportion of preferred stock to bonds issued by electric utilities during the six-year period, new issues of bonds and preferred stock having been sold in proportion of about 23 to 1. However, it should not be inferred that such a relationship exists between outstanding bonds and preferred stocks in the capital structures of electric operating utilities. For example, in the volume entitled "Statistics of Electric Utilities in the United States—1939", published by the Federal Power Commission, it is shown on Page X that for 383 Class A and Class B privately owned electric utilities, long-term debt constituted 51.8% of the total amount of securities outstanding as of December 31, 1939, while preferred stocks comprised as of December 31, 1939, addition, common stocks accounted for 32.2% of the securities outstanding and the remainder, or 0.7%, consisted of premiums, assessments, etc., on capital stock.

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Schedule 11 shows for each issue the net proceeds per share realized by the issuing company from the sale of preferred stock as well as the offering price per share to the public. In addition, it shows the percent relationship of annual dividends both to net proceeds and to price paid by public.

For example, a 4½% preferred stock issue of Appalachian Electric Power Company was sold in December 1940 at $106 per share to yield 4.25% to purchasers. The company realized $102.50 per share as the net proceeds from the sale after meeting all expenses of floating the issue, the dividend requirement of $4.50 per share representing an annual cost to the company for preferred stock capital of 4.39% ($4.50÷$102.50). The expenses of

floating the issue therefore resulted in increasing the annual preferred stock expense of the company over the annual yield to purchasers by 0.14%. Stated another way, the yield to purchasers, 4.25%, plus cost of flotation, 0.14%, equals the annual cost to the company for preferred stock capital, 4.39%.

Inspection of Schedule 11 reveals that the weighted average cost of flotation in connection with electric operating utility preferred stock issues was 0.12% in 1935 (4.50% − 4.38%), 0.15% in 1936 (4.77% − 4.62%), 0.15% in 1937 (4.78% − 4.63%), 0.19% in 1938 (5.04% − 4.85%), 0.22% in 1939 34 (5.21% − 4.99%), and 0.16% in 1940 (4.52% − 4.36%).

Over the entire period 1935–1940, the weighted average cost of flotation was 0.16% (4.74% − 4.58%). In 1940 the cost of flotation for five preferred stock issues carrying a dividend rate of 4½% or lower ranged from 0.11% to 0.16%. These five issues were sold at prices to yield from 3.85% to 4.37% to purchasers.

*Schedule 11–A.*—This schedule contains details of the two electric operating utility preferred stock issues sold to the public in the first two months of 1941. The aggregate offering price of such issues was approximately $8,000,000, and the average yield to purchasers was 4.81%. It will be noted that both issues carried a dividend rate of 5%

*Schedule 12.*—Schedule 12 contains details of all known offerings of electric operating utility common stocks during the period from 1935 through February 1941. Of the six issues listed in this schedule, three were offered to the public in 1940, one was offered in 1939, and the other two issues were offered primarily to stockholders in 1935 and 1937, respectively. In contrast with Schedule 9, Page 5, which reflects the sale of $6,622,520 of new issues of common stock during the year 1940, Schedule 12 reflects common stock sales amounting to $22,687,290 in that year. By reference to the footnotes in Schedule 12 it will be seen that only the issue of West Penn Power Company ($4,320,000), and 68,852 shares of the Indianapolis Power & Light Company issue ($1,652,520) fall within the category of new issues. The difference between the sum of the foregoing amounts, $5,972,520, and the above total of $6,622,520 for common stock issues in 1940, is represented by an issue of common stock of Bridgeport Hydraulic Company, a nonelectric utility, amounting to $650,000.

35 For each issue listed in Schedule 12 there are given the name of the issuing company, a description of the issue,

the offering date, the number of shares offered and amount of offering, the price to underwriters (if underwritten), the net price to company, the price to public in dollars per share, and the cost of flotation in dollars per share and percent of offering price, together with the amount of the issuing company's latest reported annual earnings per share of common stock for a twelve-months' period preceding the offering date, the percent of such earnings per share to offering price, and the percent of gross income available for common stock in the periods for which earnings per share are given.

The first issue in Schedule 12 is that of Boston Edison Company (formerly Edison Electric Illuminating Co. of Boston), comprising 82,289 shares of $100 par common stock offered to stockholders in the latter part of 1935 at a subscription price of $150 per share. Approximately 94% of the shares offered were taken up by stockholders and the remaining shares were offered to the public at a price of $166 per share. The proceeds were used to retire a portion of the company's outstanding indebtedness. On the basis of earnings of $9.73 per share recorded for the twelve months ended September 30, 1935, the average offering price of $150.93 per share resulted in an earnings-price ratio of 6.44%. The proportion of the company's gross income available for common stock in the period mentioned was 61.91%.

The second issue in Schedule 12 was sold as the result of an offering to stockholders of Tampa Electric Company in November 1937 to purchase 31,497 shares of the company's no par common stock at a subscription price of $20 per share. The
36 stockholders subscribed to 30,712 shares, or approximately 97.5% of the shares offered. On the basis of earnings of $2.41 per share for the twelve months ended July 31, 1937, the offering price of $20 per share resulted in an earnings-price ratio of 12.05%. In this connection, it should be mentioned that the range of market quotations for Tampa Electric Company common stock in 1937 was 25¼–41. It is thus apparent that the price of $20 per share paid by stockholders was well below the then current market price.

The next issue shown is that of Newport Electric Corporation, consisting of 59,550 shares of $20 par common stock offered to the public in May 1939 at $29.50 per share. This offering did not represent new financing by the company inasmuch as the stock offered, constituting all of the company's outstanding shares, was sold for the account of Utilities Power & Light Corporation,

former parent. The price of $27.00 per share to underwriters represented a discount of $2.50 per share from offering price to public, and the net proceeds from the sale amounted to $26.85 per share. The cost of flotation was therefore $2.65 per share, or 8.98% of offering price. On the basis of earnings of $2.85 per share for the twelve months ended March 31, 1939, the offering price of $29.50 resulted in an earnings-price ratio of 9.66%.

In April 1940, 714,835 no par common shares of Indianapolis Power & Light Company were offered to the public at a price of $24.00 per share. Of this number, 645980 shares represented previously issued shares which had been held by the trustee for Utilities Power & Light Company, former parent company. The remaining 68,855 shares represented new financing by Indianapolis Power & Light Company, the proceeds from which con-
37 stituted new capital. The price of $22.00 to underwriters represented a discount of $2.00 per share from offering price, and the net proceeds from the entire issue amounted to $21.97 per share, resulting in a flotation cost of $2.03 per share or 8.46% of offering price. Based on pro forma earnings of $1.83 per share for the year ended December 31, 1939, the offering price of $24.00 per share resulted in an earnings-price ratio of 7.63%. The proportion of the company's gross income available for common stock in 1939 was 33.57%. In conjunction with the above offering of common stock Indianapolis Power & Light Company also sold privately an issue of 2,500 shares of 6% cumulative preferred stock as indicated in Schedule 11.

West Penn Power Company offered for sale to the public in April 1940 an issue of 160,000 shares of no par common stock representing new capital. The shares were sold to underwriters at a discount of $2.00 per share from offering price and other expenses of issuance amounted to $0.24 per share, resulting in a flotation cost of $2.24 per share, or 8.30% of offering price. Based on earnings of $1.62 per share for the year ended December 31, 1939, and on offering price of $27.00 per share, the earnings-price ratio was 6.00%. The proportion of the company's gross income available for common stock in 1939 was 52.84%. In the same month the company offered publicly its first mortgage 3% bonds, Series K, due 1970, Rating Aa, in the principal amount of $3,500,000 at a price of 104½ to yield 2.78% to purchasers, as indicated in Schedule 10–A.

In October 1940, 85,000 shares, constituting all outstanding common shares of Michigan Public Service Company, were of-

fered to the public at a price of $14.25 per share. The
38 shares offered had previously been held by the trustee for Inland Power & Light Corporation, former parent company; accordingly, the offering did not represent new financing. The price to underwriters was $12.30 per share, or a discount from offering price of $1.95 per share. Details of other expenses of issuance were not available. The discount to underwriters was equal to 13.68% of offering price. On the basis of earnings of $1.16 per share for the twelve months ended June 30, 1940, and offering price of $14.25 per share, the resulting earnings-price ratio was 8.14%. The proportion of the company's gross income available for common stock for the period mentioned was 24.09%.

*Economic Conditions.*

*Chart 7.*—Chart 7 shows the range of the composite wholesale commodity price index of the U. S. Bureau of Labor Statistics during the period since 1920, as well as the wholesale price indexes for farm products, foods, and industrial products. From January 1926 through December 1937, the indexes are based on 784 commodity series. However, in January 1938 the number of series was increased to 813, and subsequently, in March 1940, to 863; in October 1940, to 887; and, in January 1941, to 889. The 889 items are grouped into 10 major classifications, consisting of farm products, foods, and eight classifications comprising the industrial products group.

Chart 7 clearly portrays the severe decline in prices which started in 1929 and carried prices to record low levels in 1933. It will also be seen that from March 1933 to March 1937 prices rose steadily, with minor interruptions, the combined index rising from 60% to 88% of the 1926 level during this period. Subsequent to
39 1937, there was a gradual but steady decline in wholesale prices, the combined index in August 1939 reaching the lowest level since 1934. However, in September 1939, coincident with the outbreak of war in Europe, all indexes advanced sharply. It is of interest to note that wholesale prices of farm products and foods advanced to a much greater extent than prices of industrial products, as indicated below:

| | August 1939 | September 1939 | Net increase |
|---|---|---|---|
| All commodities | 75.0 | 79.1 | 4.1 |
| Farm products | 61.0 | 68.7 | 7.7 |
| Foods | 67.2 | 75.1 | 7.9 |
| Industrial products | 80.1 | 82.1 | 2.0 |

Chart 7 discloses that the abrupt rise in wholesale prices which occurred in September 1939 was followed by a general decline which continued through August 1940. Following a moderate rise in September 1940 an upward trend in wholesale prices was maintained through the remainder of 1940. Data now available disclose that the general level of prices has continued to rise in 1941. The extent of the rise in wholesale prices since August 1940 and the distribution of price increases among the major classifications of commodities are indicated in the following comparison of index figures for the month of August 1940 and for the week ended April 19, 1941:

| Number of commodities | Classification | August 1940 | Week ended April 19, 1941 | Percent increase |
|---|---|---|---|---|
| 889 | All commodities | 77.4 | 83.0 | 7.24 |
| 67 | Farm products | 65.6 | 75.0 | 14.33 |
| 123 [1] | Foods | 70.1 | 77.8 | 10.98 |
| 699 | Industrial products | 82.0 | 86.0 | 4.88 |
| 110 [1] | Building materials | 93.3 | 100.0 | 7.18 |
| 138 | Chemicals and allied products | 76.7 | 82.2 | 7.17 |
| 24 | Fuel and lighting materials | 71.1 | 73.3 | 3.09 |
| 41 | Hides and leather products | 96.9 | 104.3 | 7.64 |
| 63 | House-furnishing goods | 88.5 | 91.6 | 3.50 |
| 146 | Metals and metal products | 94.9 | 97.8 | 3.06 |
| 114 | Textile products | 72.3 | 80.5 | 11.34 |
| 63 | Miscellaneous | 76.7 | 78.4 | 2.22 |

[1] Duplications have been eliminated from the total. 22 farm products are duplicated in foods. 2 metals and metal products are duplicated in building materials.

It will be seen from inspection of the last column shown in the above summary that since August 1940 all indexes have increased, the percentage gains being 14.33% for farm products and 10.98% for foods. Although standing at a higher level in relation to the 1926 average than the farm products and foods indexes, the index for the industrial products group in April 1941 was only 4.88% higher than in August 1940. The more important changes in the subgroup industrial products indexes were increases of 11.34% for textile products; 7.64% for hides and leather products; 7.18% for building materials; and 7.17% for chemicals and allied products.

*Chart 8.*—Chart 8 shows the Federal Reserve Board's index of industrial production and the U. S. Department of Labor's indexes of factory employment and pay rolls for the period since 1920, all without adjustment for seasonal variation. The Federal

Reserve Board also publishes a seasonally adjusted index of industrial production, as well as an adjusted index of factory employment derived from the unadjusted indexes computed by the U. S. Department of Labor. For the purposes of this study it was considered preferable to use unadjusted indexes for all three series in order to obtain uniformity. Comparison of the adjusted and unadjusted indexes for industrial production discloses slight variations, but the general pattern of the indexes over a period of time is quite similar. This is because adjustments for seasonal variation are applied to monthly data and cancel out when monthly figures are averaged for a year.

It will be noted that the base period of the index of industrial production is shown as 1923–1925, whereas the index as published uses the years 1935–1939 as the base period. This change in base period was made in order to permit comparison of the industrial production index with the indexes of factory employment and pay rolls for which the base period is also the years 1923–1925.

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The Federal Reserve Board recently published a complete revision of its index of industrial production, the revised index being constructed with the average for the years 1935–1939 as equal to 100, whereas in the old index the average for the years 1923–1925 was taken as equal to 100. As a result of the revision, which was carried back through 1919, the new index is derived from 81 individual monthly series directly representing all principal groups of industries in manufacturing and mining, as compared with 60 individual series from which the old index was derived. The index of industrial production was compiled by the Federal Reserve Board for the purpose of measuring changes in the physical volume of the country's industrial output.

Chart 8 indicates that the 1929 peak in industrial production was reached when the index advanced to 134.5 in September of that year. Commencing in October 1929, the index declined without important interruptions until it had fallen to 59.8 in mid-year of 1932. Following an advance in the Fall of 1932, which was largely cancelled in the first few months of 1933, the index advanced to 96.6 in 1933. After several major fluctuations, the index commenced to rise late in 1934 and this rise continued at an accelerated pace which carried the index 9.2 points above the 1929 peak to 143.7 in May 1937. Thereafter, the index fell

abruptly through the remainder of 1937 and more gradually in succeeding months, reaching its next low point in May
42 1938 at 93.1. From that level the index advanced to 117.2 in November. Following a minor recession in the early months of 1939, a substantial increase in industrial production resulted in the establishment of the index in October and November 1939 at a level slightly higher than the 1937 peak. After declining to 127.6 in April 1940, the index advanced sharply through the remainder of the year to a 1920–1940 record peak of 155.2 in November and December. It will be observed that the average level of industrial production in 1940, 139.9, was well above the averages of 126.4, 129.9, and 124.1, respectively, shown for the previous peak years 1929, 1937, and 1939.

Data now available disclose that following a minor decline from the December level in January 1941, the index of industrial production rose above the December level to 158.6 in February 1941 and 164.4 (preliminary) in March 1941.

Chart 8 shows that the general course of the index of industrial production has been closely followed by the indexes of factory employment and pay rolls throughout the period since 1920, although the latter indexes have shown a tendency in recent years to pursue lower levels than formerly in relation to the industrial production index. At the peak of industrial production in 1929 (134.5), the employment and pay rolls indexes reached simultaneous peaks of 110.3 and 114.4, respectively. The lowest levels recorded in 1932 and 1933 were 61.0 for employment and 38.3 for pay rolls, while the index of industrial production reached a depression low point of 59.8. At the production peaks of 1937, 1939, and 1940, the employment and pay rolls indexes, in comparison with the industrial production index, were as follows:

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| | Industrial production | Factory employment | Factory pay rolls |
|---|---|---|---|
| May 1937 | 143.7 | 111.5 | 116.1 |
| November 1939 | 144.8 | 107.5 | 103.2 |
| December 1940 | 155.2 | 116.2 | 122.4 |

It is reported that the factory employment and pay rolls indexes for March 1941 were 119.9 and 131.0, respectively, representing increases over December 1940 of 3.7 points for employment and 8.6 points for pay rolls, as compared with an increase of 9.2 points (from 155.2 to 164.4) for industrial production.

It will be noted that although the 1940 average of 139.9 for industrial production was well above the average for previous peak years during the period 1920–1940, the 1940 average of 107.5 for employment was exceeded in 1937 and the 1940 average of 105.4 for pay rolls was exceeded both in 1929 and 1920.

*Chart 9.*—This chart reflects changes in the indexes of durable and nondurable manufactures. These indexes represent two of the three major series on which the Federal Reserve Board's index of industrial production is based, the other series being that on minerals production. The chart also portrays the course of freight carloadings of Class I steam railways by means of an index derived by the Federal Reserve Board from weekly data computed by the Association of American Railroads. The monthly data shown on Chart 9 are adjusted for seasonal variation and cover the period from 1920 to date. The base period for the published indexes for durable and nondurable manufactures is the period 1935–1939; however, the indexes have been recomputed in order to change the base period to 1923–1925, as in the case of the index of industrial production shown on Chart 8. No change has been made in the base period of the published index of freight carloadings.

The Federal Reserve Board's index of durable manufactures covers the production of iron and steel, machinery, transportation equipment, nonferrous metals and metal products, lumber and lumber products, and stone, glass, and clay products. The index of nondurable manufactures covers the production of the following, together with products thereof: textiles, leather, manufactured foods, alcoholic beverages, tobacco, paper, printing and publishing, petroleum and coal products, chemicals, and rubber. In the base period used in the published index, i.e., the period 1935–1939, the proportions of the Federal Reserve Board's index of industrial production represented by production of durable and nondurable manufactures, respectively, were 37.93% and 46.87%, with minerals production accounting for the remainder of 15.20%.

Inspection of Chart 9 discloses that the indexes for both durable and nondurable manufactures, after the depression of 1920–1921, advanced without major declines until 1929, reaching peaks of 138 for durable manufactures and 132 for nondurable manufactures in June of that year. Following 1929 both indexes declined sharply, falling to their lowest depression levels in 1932 and 1933. It will be noted that the production index for durable

goods dropped to 31 in March 1933, while the lowest point reached by the nondurable manufactures index was 87 in July 1932. Subsequently, both indexes advanced to reach their next peaks in 1937. However, while the 1937 peak for nondurable manufactures, at 158 in April and May, was considerably higher than the 1929 peak of 132, the durable goods index, at 136 in August 1937, was slightly below the 1929 peak of 138.

The recession commencing late in 1937 resulted in severe declines in both indexes, the decline from the 1937 peak being about 21% for nondurable manufactures and more than 50% for durable manufactures. In the subsequent recovery period from mid-year of 1938 through the close of 1939 both indexes recovered to approximately the 1937 peak level. The upward trend was reversed during the early months of 1940, but thereafter both indexes advanced and by the year-end had exceeded previous peak levels, the indexes for December 1940 being 161 for durable manufactures (1929 peak, 138), and 171 for nondurable manufactures (1929 peak, 132). After a rise to 167 in January 1941, the index for durable manufactures rose to 169 in February and was 167 (preliminary) for March, while the index for nondurable manufactures, after declining to 168 in January 1941, advanced to 171 in February and to 176 (preliminary) in March.

As will be seen from Chart 9, the freight carloadings index exhibits fluctuations occurring generally at the same times and in the same direction as the production indexes for durable and nondurable manufactures. However, it will be noted that the carloadings index in recent years has moved at a considerably lower level than formerly in relation to the production indexes and failed to approach its predepression level in the production peaks of 1937, 1939, and 1940. From a peak of 110 reached in 1929, the carloadings index declined to 49 in 1932, advanced to 84 in 1937, and was 82 at the 1939 production peak. Declining early in 1940 to 69, the index advanced through the remainder of 1940 and in January 1941 stood at 86, the highest level reached since October 1930. Data now available disclose that the index was maintained at 86 in February and advanced to 87 in March 1941.

*Chart 10.*—This chart shows the total amount of national income payments by type of payment annually from 1929 to date, as computed by the U. S. Department of Commerce. A full discussion of these data is contained in a bulletin recently published by the Department of Commerce entitled "Monthly Income

Payments in the United States, 1929–1940" and a revised series covering the period 1929–1939 was published in the October 1940 issue of the Survey of Current Business, a Department of Commerce publication. Briefly, the series is intended as an iddex of income payments actually received by individuals. For this reason the series is not identical with the annual estimates of national income published by the Department of Commerce. The principal differences are that in arriving at estimates of national income payments, all business savings (except in agriculture) and employer and employee contributions to retirement and unemployment reserve funds are excluded from national income; and all direct relief payments, public-assistance disbursements by governmental agencies, benefits paid under unemployment compensation and old-age insurance programs, and payments on veterans' adjusted service certificates are included.

The chart shows, as might be expected, that the bulk of national income payments represents compensation of employees. The other major classes of income payments in the order of their importance in proportion to the total consist of entrepreneurial income, dividends and interest, Social Security benefits and other labor income, including pensions, and direct and other relief payments.

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National income payments in 1929 are estimated to have been in excess of 82 billions of dollars. By 1933 the figure had declined to less than 47 billion dollars, or only 57.1% of the 1929 total. In 1934 national income payments increased to 54 billions, in 1935 to 58.8 billions, in 1936 to 67.8 billions and in 1937 to 71.8 billions. From 1937 forward the chart shows for each month a twelve-months' moving total in order to disclose the trend. It is indicated that the trend of national income payments was steadily downward through all of 1938 with the result that total income payments for that year were about 5½ billion dollars less than in 1937. Beginning in 1939, however, this downward trend was reversed, and each month during 1939 and 1940 has witnessed a gradual but consistent increase in total income payments with the result that national income payments in 1939 exceeded the total for 1938 by almost 4 billions of dollars, and 1940 payments exceeded those for 1939 by over 4 billions. It will be noted that total income payments of 74 billions in 1940 exceeded the 1937 total by 2½ billions, but amounted to about 8 billions less than the 1929 total.

*Chart 11.*—In any discussion of national income, some means of determining the relative value of the dollar, that is, its purchasing power over the necessities of life, is desirable in order to compare changes in real income as distinguished from cash income. For this purpose, an index of the cost of living may be used. Such an index has been computed by the National Industrial Conference Board to show the trend of living costs of wage earners' families. The index is based on a comprehensive list of retail prices and rents in five classifications which are weighted according to their relative importance as follows: Foods, 33; Housing, 20; Clothing, 12; Fuel and Light, 5; and Sundries, 30. In the latter group are included such items as household furnishings, reading materials, recreation and tobacco, as well as organization dues, medical care, carfare, drugs, etc.

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By obtaining the reciprocal of the cost of living index (using 1929 as the base year) the purchasing power of the dollar at 1929 prices may be determined for any date. For example, Schedule 17 indicates that the cost of living index for the year 1933 was 74.9. The reciprocal of this index is 1/74.9, or 0.01335, which, translated into dollars and cents, becomes $1.335. This represents an increase of 33.5 percent since 1929 in the purchasing power of the dollar in its command over the necessities of life for the average wage earner's family.

To illustrate, let it be assumed that in 1929 four units of a given commodity could be purchased for $1.00; and that by 1933 the cost of living index had declined from 100 to 80, and the same four units could be purchased in 1933 for $0.80. It is clear that, at $0.20 per unit in 1933, it would be possible to purchase five units for $1.00 in that year, as against four units in 1929, so that the 1933 dollar would purchase 25% more of that commodity than the 1929 dollar, or, in terms of 1929 prices the 1933 dollar was worth $1.25.

However, Schedule 17 indicates that for every $100 of income payments received by individuals in the year 1929, only $57.10 was received in 1933. On the basis indicated above, each dollar of this reduced amount of income was worth 1.335 times as much as the 1929 dollar in its command over the necessities of life, so that $57.10 of 1933 cash income was equivalent to $76.20 of 1929 cash income. Therefore, although the index of national income payments declined from 100 in 1929 to 57.1 in 1933, the decline in real income was only from 100 to 76.2.

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In other words, the effects of the depression would have been much more severe for all concerned if the cost of living had remained at the 1929 level during the depression period.

It is of interest to note that the purchasing power of income payments received by individuals in 1937, on the basis indicated, was practically the same as it was in 1929. In 1938 there was a decline both in cash income received by individuals and in its aggregate purchasing power, while in 1939 and 1940 there has been consistent improvement from the standpoint of both cash income and real income.

*Comparative Risk.*

In stating the basic principles in connection with the problem of rate of return, it was indicated that the element of risk is a fundamental factor to be considered in the determination of a proper rate of return. Accordingly, this section is devoted to the presentation of data by means of which the impact of risks confronting public utilities and other forms of enterprise may be measured from the standpoint of stability of earnings.

*Chart 12.*—Chart 12 reflects the trend of corporate earnings, that is, net earnings available for preferred and common stock, based on earnings indexes computed by Standard Statistics Company for 13 utilities, 117 industrials, and all Class I railroads. From this chart it may be seen that the trend of utility earnings has not been subject to very sharp fluctuations, as in the case of industrials and railroads. While the earnings indexes for the latter two groups dropped within less than four years from peaks of 140 and 120, respectively, in the latter part of 1929, down to levels indicating substantial deficits in 1933, the reduction in public utility earnings in the same period is indicated by a decline in the earnings index from 140 to 90 (base year 1926=100).

Subsequent to 1933 all indexes exhibited a degree of recovery followed by recession in 1934 and 1935, after which there was continued improvement until 1937. The highest levels reached in the latter year were 131.4 for utilities, 114.4 for industrials, and 34.0 for railroads. A decline in earnings of all three corporate groups commenced in the latter part of 1937, but the decline in utility earnings was much less pronounced. It will be noted that an upward trend in net earnings was maintained by all three groups throughout the year 1939, with the result that 1939 earnings exceeded those for 1938. Utility and railroad earnings for

1939 almost equalled the 1937 calendar-year levels, but industrial earnings still remained approximately 25 percent below the 1937 level.

Earnings for the year 1940 on the basis of actual earnings for the first two quarters and estimated earnings for the third and fourth quarters of the year were above those for the calendar year 1939, with industrials and railroads showing the greater gain. The indexes for the year 1940, as shown in Schedule 18, are as follows: Utilities, 124.5; Industrials, 98.2; Railroads, 26.3. It will be noted that industrial earnings, at 98.2, were somewhat below the 1937 level of 106.1, while utility earnings were slightly lower and railroad earnings were considerably higher than in 1937.

It is of interest to note the average earnings indexes for
51 the eleven-year period 1930–1940 of the three groups of companies, which are as follows: Utilities, 111.7; Industrials, 59.9; Railroads, 11.5. In each instance the earnings index is compared with 1926 calendar-year earnings as equal to 100.

The details supporting Chart 12 are contained in Schedule 18. The names of the thirteen utilities whose earnings form the basis of the public utility earnings index, together with the principal utility service performed by each company or system as measured by the proportion of total operating revenues derived therefrom, are listed on Page 7 of Schedule 18.

An independent compilation of net earnings available for preferred and common stock, as reported by the five predominantly electric utility companies or systems listed on Page 7 of Schedule 18, discloses that the earnings index for those five companies or systems was for the most part on a considerably higher level through the period 1925–1940 than the index for the entire group of thirteen utilities, as may be seen from the following comparison:

| Year | Earnings index | | Year | Earnings index | |
|---|---|---|---|---|---|
| | 13 utilities | 5 electric utilities | | 13 utilities | 5 electric utilities |
| 1925 | 87.3 | 96.5 | 1933 | 97.8 | 100.5 |
| 1926 | 100.0 | 100.0 | 1934 | 88.7 | 98.7 |
| 1927 | 106.9 | 107.2 | 1935 | 93.1 | 107.1 |
| 1928 | 124.0 | 136.3 | 1936 | 121.0 | 114.9 |
| 1929 | 142.6 | 161.0 | 1937 | 125.8 | 132.8 |
| 1930 | 127.7 | 163.8 | 1938 | 107.1 | 116.5 |
| 1931 | 123.6 | 134.3 | 1939 | 123.1 | 137.4 |
| 1932 | 96.9 | 120.6 | 1940 | 124.5 | 143.2 |

The above index for electric utilities may be compared with the following indexes based on net income of the entire private
52 electric light and power industry for the years 1932–1939, as reported in "The Electric Light and Power Industry in the United States, Year 1939" published by the Edison Electric Institute (Publication H 2, March 1940, p. 21): 1932, 120.6; 1933, 98.7; 1934, 95.4; 1935, 103.0; 1936, 112.4; 1937, 123.5; 1938, 110.8; 1939, 121.3. It will be seen that the latter index figures for the entire electric utility industry reasonably approximate those for the five electric utilities in the above summary except that from 1937 to 1939 the earnings level of the above five companies was somewhat higher than that of the industry.

It will be of interest to note the results of the following comparison of earnings indexes of the electric light and power and natural gas industries for the period 1932–1939, with the index for 1932 earnings available for dividends and surplus taken as 120.6 for purposes of comparability:

| Year | Electric light and power industry | Natural gas industry [1] | Year | Electric light and power industry | Natural gas industry [1] |
|---|---|---|---|---|---|
| 1932 | 120.6 | 120.6 | 1936 | 112.4 | 189.1 |
| 1933 | 98.7 | 73.6 | 1937 | 123.5 | 205.0 |
| 1934 | 95.4 | 86.1 | 1938 | 110.8 | 170.2 |
| 1935 | 103.0 | 153.8 | 1939 | 121.3 | 197.2 |

[1] Based on net income available for dividends and surplus as reflected in Volume III, Schedule 2, of this exhibit.

The above index figures for the natural gas industry are based in part on prior years' manufactured gas earnings by companies subsequently changing over to straight natural gas operations during the period mentioned. They also reflect in part the
53 introduction of natural gas in territories not previously supplied with gas service as well as increased net income of companies after commencement of natural gas operations through increased volume of sales, improved operations, or reductions in fixed charges resulting from debt refunding operations. However, while the above earnings indexes for the electric utility and natural gas industries may not be strictly comparable to one another in certain respects, they furnish ample indication that the risks confronting the natural gas industry have not deprived it of an opportunity to achieve substantial growth in recent years.

*Chart 13.*—Chart 13 shows the relationship of net profit to total invested capital for leading American industrial, utility, and railroad corporations, based upon studies and publications of the Standard Statistics Company, and covers the thirteen-year period 1927–1939. Two methods of computing invested capital may be used. By one of these methods invested capital is considered as representing outstanding securities plus surplus and capital reserves. This method is the basis of the data reflected on Chart 13. Net profit, as defined in the computations used for this chart, represents the amount available for fixed charges after depreciation, etc. Accordingly, comparable earnings figures are obtained regardless of differences in capital structure.

It may be pointed out, in connection with Chart 13, that not only are utility earnings more stable than earnings of industrials and railroads but for the ten-year period 1930–1939 the average percent of utility net profit (as defined) to total invested capital was approximately equal to the industrial average and, of course, considerably higher than the railroad average. The aver-
54 ages for the ten-year period are as follows: Utilities 5.57%; Industrials 5.59%; Railroads 3.17%.

Page 3 of Schedule 19 contains a list of the 21 leading utility corporations for which the relationship of net profit to invested capital is expressed in Chart 13. For each utility corporation or system in the list is shown the principal utility service rendered, together with the percent of total operating revenues derived from such service. It will be noted that 13 of the 21 utility corporations or systems listed therein are predominantly electric utilities.

*Chart 14.*—Chart 14 portrays a similar relationship to that shown in Chart 13. However, in the data supporting Chart 14, which are contained in Schedule 20, invested capital is represented as the total of property accounts (less reserves for depreciation) plus inventories of materials and supplies. The resulting chart does not differ greatly from Chart 13 in the trends shown for the different types of companies, although the percentage levels differ somewhat.

In this instance, also, an independent compilation was made of underlying data for the 13 predominantly electric utility companies or systems (see page 3 of Schedule 19) included in the group of 21 leading utility corporations. From a comparison of the results of such compilation with the percentages of net profit

to property accounts and inventories for the group of 21 leading utility corporations, as presented on the following page, it would appear that the results shown in Chart 14 with respect to the group of 21 utility corporations very closely reflect the earnings experience of the electric utilities included in the group during the thirteen-year period 1927–1939.

| Year | Percent net profit | | Year | Percent net profit | |
|---|---|---|---|---|---|
| | 21 utilities | 13 electric utilities | | 21 utilities | 13 electric utilities |
| 1927 | 7.3 | 7.3 | 1934 | 5.8 | 5.8 |
| 1928 | 7.5 | 7.2 | 1935 | 5.7 | 5.8 |
| 1929 | 7.6 | 7.4 | 1936 | 6.1 | 6.0 |
| 1930 | 7.3 | 7.3 | 1937 | 6.4 | 6.3 |
| 1931 | 6.9 | 6.8 | 1938 | 6.2 | 5.9 |
| 1932 | 6.1 | 6.2 | 1939 | 5.9 | 5.8 |
| 1933 | 5.8 | 5.8 | | 6.2 | 6.2 |

*Local Conditions.*

This section is presented to afford a perspective of economic conditions in the general area of ultimate consumption of natural gas supplied through the facilities of Hope Natural Gas Company.

*Chart 15.*—Chart 15 shows the comparative rediscount rates of the New York and Chicago Federal Reserve Banks and indicates that these rates are at the lowest point since 1920, namely, 1.00% and 1.50%, respectively. No change in rate has been effected by either bank since August 1937 as indicated in Schedule 21 which shows all changes in the rediscount rates effected by both Federal Reserve Banks since 1918.

*Schedule 21-A.*—This schedule presents a compilation of the year-end rediscount rates of the twelve Federal Reserve Banks for the years 1929 to 1940, inclusive. It will be observed that in 1937 the rediscount rate of each of the twelve banks, except the Cleveland Federal Reserve Bank, was reduced by one-half percent. The rate then established was 1.50% for all banks, except the Federal Reserve Bank of New York, which reduced its rate from 1.50% to 1.00%. There has been no change in rate since 1937 by any of the twelve banks with the exception of the Federal Reserve Bank of Boston which reduced its rate from 1.50% to 1.00% in 1939.

56 *Chart 16.*—Chart 16 compares averages of rates on commercial loans charged customers by banks in principal cities of the country and shows separately the rates for banks in New

York, banks in seven northern and eastern cities exclusive of New York City, and banks of eleven southern and western cities. As indicated in Schedule 22 supporting the chart, the figures relate to rates charged by reporting banks to their own customers as distinguished from open market rates. The averages are based on rates reported for all new commercial and industrial loans with maturity of 30 days to 12 months, except paper purchased in the open market and loans secured by real estate, but including business loans secured by stocks and bonds as well as business loans otherwise secured and unsecured. Loans to building and loan associations, insurance companies, credit unions, and similar organizations not engaged directly in financing the sale of consumers' durable goods, loans to hospitals, educational institutions, etc., and personal or installment loans to individuals other than for business purposes are not included.

The cities included in the group of seven other northern and eastern cities and eleven southern and western cities are listed on Page 2 of Schedule 22. As indicated on Chart 16, the rates charged customers by New York City banks are considerably lower than those charged by the banks outside New York, while the rates of the seven other northern and eastern cities in turn are lower than the rates charged by the eleven southern and western cities. The comparative average rates for the year 1940 are as follows: New York City 2.04%; seven northern and eastern cities 2.56%; eleven southern and weestern cities 3.38%.

57 It will be noted that all rates drifted steadily lower during the period from the Spring of 1933 through 1936, after which time a certain degree of stability is noted until the early part of 1939. In the latter year changes were made both in the method of computing the averages and in the periods for which rates are reported. It should be noted that the current quarterly averages are not strictly comparable with the monthly averages shown for the period 1928–1938. The two series differ in that the monthly series were based on reports of prevailing rates, whereas for the present quarterly series each bank reports the numbers and amounts of loans made at specified rates and within various rate ranges. On the new basis, rates are at a higher level for New York City by approximately one-half per cent.

Rates currently are based on reports made four times a year covering data on new loans for the first half of March, June, September, and December. Between September 1938 and September 1939 rates first increased and then declined, but it is reported that this

movement was largely due to seasonal influences. Because of methods of reporting, seasonal influences did not appreciably affect the rates that were formerly reported by banks. The rates charged customers by New York City banks and banks in the seven other northern and eastern cities, which include the cities of Pittsburgh, Cleveland and Chicago, reflected a decline in the last quarter of 1939 which was followed by rises in the first and third quarters and declines in the second and fourth quarters of 1940. On the other hand, rates charged by banks in the eleven southern and western cities reflected no substantial change in the last
58 quarter of 1939 but exhibited slight increases in the first three quarters of 1940 and a decline in the fourth quarter.

*Schedule 23.*—This schedule contains comparative indexes of department store sales for the United States as a whole and for the Cleveland and Richmond Federal Reserve Districts. The Cleveland District includes the State of Ohio, the western portion of Pennsylvania, the eastern portion of Kentucky and a portion of West Virginia, and the Richmond District includes the remainder of West Virginia, the States of Maryland, Virginia, North Carolina, South Carolina, and the District of Columbia. Schedule 23 indicates that during the period since 1919 the level of department store sales in the above districts compared rather favorably with that for the nation, the index for the Cleveland District being somewhat below the national level and that for the Richmond District considerably above the national level, particularly in recent years. The respective indexes for 1940 (1923-1925=100) were as follows: United States 94, Cleveland District 96, Richmond District 122.

*Schedule 24.*—This schedule is presented for the purpose of comparing the relative changes in the level of income payments for the United States and the States of Ohio, Pennsylvania, and West Virginia for the period since 1929. An index with 1929 as the base year has been computed from estimates published by the National Income Section of the U. S. Department of Commerce. The United States totals in Schedule 24 have been taken from Schedule 16 described above.

It will be noted that from 1929 to 1933 the index of income payments for the United States declined to 57.1, the indexes for Ohio and Pennsylvania falling somewhat below that level and the
59 West Virginia index declining only to 58.3. Subsequent to 1933 all indexes advanced through 1937, West Virginia ranking highest in that year at 95.2 and Pennsylvania rank-

ing lowest at 83.5, with Ohio slightly above the national total. All indexes declined in 1938 and advanced in 1939, but the respective 1939 levels remained below those for 1937. The United States index, at 85.4 in 1939, was fractionally higher than the Ohio index, 6.9 points above the Pennsylvania index, and 3.9 points below the index for West Virginia. Consequently it may be said that there has been no drastic change in the level of purchasing power in the three States referred to in relation to the country as a whole during the period since 1929.

*Schedule 25.*—This schedule presents comparative statistics on estimated cash farm income, value of manufactured products added by manufacture, and value of all minerals produced for the United States and the States of Ohio, Pennsylvania and West Virginia. In the upper section of the schedule the data are reported in millions of dollars, while in the lower section the dollar amounts have been reduced to an index with the year 1929 as the base year. Figures are not available for all years in all classifications. Inspection of the data in Schedule 25 reveals that the level of estimated cash farm income from livestock and crops (including Government payments beginning in 1933) was somewhat higher for the three States than for the nation. With respect to value added by manufacture in the States' manufacturing industries, it appears that the levels in the biennial census years for the State of West Virginia have been consistently higher than those for the nation since 1929 and that the indexes for the States of Ohio and Pennsylvania have fluctuated within a narrow range mostly below the national average. However, the value of minerals produced, except in the State of West Virginia, has been relatively lower since 1929, and particularly since 1935, than for the country as a whole. It is of interest to note from the upper section of Schedule 25 that the States of Ohio and Pennsylvania are predominantly engaged in manufacturing, while the production of minerals is the major industry of West Virginia and it will be observed that for each State the level of activity in the predominant industry has been maintained on a favorable basis in relation to the national level. For the three States combined, estimated cash farm income aggregated 7.3%, value added by manufacture amounted to 19.6%, and value of minerals produced was equivalent to 19.1% of the national total, in the latest year for which data are reported.

*Idle Money Factors.*

The data in this section are presented for the purpose of showing the present situation with respect to the volume of idle investment

funds and the factors contributing to the growth of such funds in recent years.

*Schedule 26.*—This schedule reflects the total amount of funds carried by member banks of the Federal Reserve System in their reserve balances with the twelve Federal Reserve Banks, together with the portion thereof representing "required" reserves and "excess" reserves, as of the close of each year commencing with 1923.

Required reserves are funds which member banks are required by law to keep on deposit with the Federal Reserve Banks as reserves against deposits made with the member banks by their own customers. Member banks may carry balances with the Federal Reserve Banks in excess of their required reserves; such excess balances constituting what are known as excess reserves.

61. Changes in reserve requirements since June 21, 1917, are shown on Page 2 of Schedule 26. Reserve requirements on demand deposits of member banks vary according to classes of banks. Member banks are classified into three groups: central reserve city banks, reserve city banks, and country banks. Central reserve city banks are member banks located in New York City and Chicago, reserve city banks are member banks in sixty other cities of lesser size, and country banks are member banks located elsewhere. It will be noted that reserve requirements on time deposits are uniform for all member banks, while there are important variations among classes of banks in required reserves based on demand deposits.

It will be noted that in the early years of the period the total reserve balances were not subject to marked fluctuation and excess reserve balances were comparatively small in relation to total reserves, some years in fact, reflecting deficiencies in required reserves. This was the situation prevailing generally prior to 1931. In that year total reserves reached their lowest level following 1923 at 1,961 millions of dollars. In the following two years the reserves increased to 2,729 millions, but the increases in total reserves were reflected by increases in excess reserves which, at the end of 1933, were higher than those shown for any previous year.

From 1933 to 1935 total reserves more than doubled and excess reserves increased by approximately two billion dollars. Reserve balances continued to increase in 1936 but due to an increase in reserve requirements in August of that year excess reserves decreased 860 millions despite an increase of approximately a billion

dollars in total reserves. The increases in reserve requirements in March and May 1937 effected a still further
62 reduction of 772 millions in excess reserves, although total reserves increased about 400 millions in that year.

In April 1938 reserve requirements were reduced to approximately those established in March 1937 and thereafter, with no changes in reserve requirements, total reserves continued to increase to a level in excess of 14 billion dollars at the close of 1940. Required reserves have increased from 5,815 to 7,411 millions since 1937, but excess reserves have increased by 5,400 millions to the unprecedented total of over 6½ billion dollars, the figure at December 31, 1940, being 6,615 millions.

*Schedule 27.*—The purpose of this schedule is to set forth the factors which supply member bank reserve funds and those which use such funds in such manner as to show the various changes which have accounted for the rise in member bank reserve balances in the Federal Reserve Banks between June 1929 and the close of 1940.

The schedule shows that the factors supplying funds for the building up of member bank reserve balances are increases in outstanding Federal Reserve Bank credit, increases in the monetary gold stock, and increases in U. S. Treasury currency outstanding. Decreases in these items operate to decrease member bank reserve balances. Federal Reserve Bank credit consists of bills discounted for or advances made to member banks, bills bought in the open market, holdings of U. S. Government securities, and other items such as industrial advances made under Section 13b of the Federal Reserve Act.

On the other hand, the factors using or drawing upon member bank reserve balances are increases in currency in circula-
63 tion, in U. S. Treasury cash holdings, in U. S. Treasury deposits with Federal Reserve Banks, in non-member bank deposits with Federal Reserve Banks and in other Federal Reserve accounts. Decreases in these items operate to increase member bank reserve balances. The item "other Federal Reserve accounts" consists of the sum of paid-in capital, surplus, other capital accounts, and all other liabilities of the twelve Federal Reserve Banks (excluding funds deposited by member banks and Federal Reserve notes in circulation), less bank premises and all other assets of the Federal Reserve Banks (excluding gold certificates, cash, etc., on hand, holdings of bills discounted, U. S. Government securities, etc.).

Inspection of Schedule 27 will show that the net effect of changes in these factors between June 1929 and December 1940 has been an

increase of 11,670 million dollars in member bank reserve balances with the Federal Reserve Banks. With respect to such increase in member bank reserve balances, it is shown that required reserves increased by 5,078 million dollars and excess reserves increased by 6,592 million dollars.

It is apparent from inspection of Schedule 27 that the most important factor contributing to the increase in member bank reserve balances has been the increase in the monetary gold stock. From approximately 4 billion dollars in June 1929 the gold stock had increased to nearly 22 billion dollars in December 1940, a growth of 18 billion dollars during the period.

Analysis of the growth in the gold stock reveals that approximately 13¾ billion dollars of the increase has originated since 1934. Available data indicate that about half of this increase was accounted for by the net movement of capital to this country from foreign countries, not including over 4 billion dollars of gold imports arising from unaccounted-for transactions. The remainder of the increase was accounted for principally by a favorable net balance of trade and services with foreign countries and domestic gold production, which were offset to some extent by net imports of silver.

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*Schedule 28.*—This schedule shows comparative figures for all years since 1923 on total deposits and total loans and investments of all banks in the United States as contained in annual and monthly publications of the Board of Governors of the Federal Reserve System. Data are shown separately for nonmember banks and member banks of the Federal Reserve System.

The data on deposits reflect an increase of approximately 11.2 billion dollars in total deposits, exclusive of interbank deposits, from June 1929 to December 1940, whereas the comparable figures on loans and investments indicate a decrease during the same interval of about 4.3 billion dollars. The comparison reflects a net increase in uninvested funds during the period since June 1929 of 15.5 billion dollars for all banks in the United States.

For member banks of the Federal Reserve System the increase in deposits during the same period was 13.7 billion dollars which was offeset by an increase in loans and investments of 1.4 billion dollars, indicating a net increase of 12.3 billion dollars in uninvested funds of member banks during the period. This amount is seen to correspond fairly closely to the increase of 11.7 billions in member bank reserve balances, between June 1929 and December 1940, shown in Schedule 27.

65 Because of reserve requirements imposed upon member banks by law, it is evident from Schedule 27 that they are restricted in the use of reserve balances for expansion of loans and investments to that portion thereof representing excess or idle reserves. Such excess reserves, as above stated, amounted to 6,615 million dollars at the close of 1940. It is apparent, however, that loans and investments could be expanded by an amount several times greater than the current aggregate of excess reserves before the latter would be absorbed into required reserves under operation of the reserve requirements presently in effect. This possibility arises from the fact that expansion in loans and investments by the member banks considered as a group would give rise to increased deposits, unless there are offsetting influences, whereas the member banks would be required to increase their reserves against such increased deposits only to the extent of a portion of the amount of the additional deposits created by the new loans and investments, as indicated by the required percentages of reserves to deposits shown on Page 2 of Schedule 26.

From the data presented in this section, it may be seen that opportunities for investments, because of the huge growth in the volume of idle funds, have been more limited in recent years than formerly, particularly in view of the fact that since the beginning of 1934, as reflected in Schedule 9, more than seventy per cent of all corporate financing in the United States has been for refunding purposes. This situation with respect to idle funds has been reflected in the declining level of interest rates during the period since 1934.

66 STATEMENT ON VOLUME III OF EXHIBIT

As previously stated, Volume III of this exhibit contains general statistics pertaining to the natural gas industry, and in addition presents facts with respect to the ownership, issuance, prices and yields of securities of natural gas companies. The statistical data are contained in Schedules 1 to 4, inclusive, and Charts 1 to 3, inclusive, as listed in the Table of Contents. The data pertaining to securities of natural gas companies are contained in Schedule 5, together with its underlying Schedules 5-A, 5-B, 5-C, 5-D, 5-E, 5-F1, 5-F2 and 5-G, and in Schedules 6 to 9, inclusive. Information respecting the ownership and corporate affiliations (in the natural gas industry) of Hope Natural Gas Company and certain details in connection with recent financing by its parent, Standard Oil Company (New Jersey), are contained in Chart 4 and Schedules 10 and 11.

*Operating and Financial Statistics of the Natural Gas Industry.*

*Schedule 1—Revenues From Sales to Consumers.*—Schedule 1 portrays the growth of the natural gas industry from the standpoint of revenues, volume of gas sales, and number of customers by years from 1929 to 1939, both inclusive, as taken from Statistical Bulletin No. 41, October 1940, published by the American Gas Association under the title "Annual Statistics of the Natural Gas Industry in 1939." The data on revenues, gas sales and customers are set forth under separate captions in the upper, middle, and lower portions of the schedule.

67 As indicated in the footnote, the figures do not include natural gas used in field operations and in the manufacture of carbon black or gas used by distributing companies in the conduct of their own operations. Furthermore, the statistics do not include data for companies selling mixed manufactured and natural gas.

By referring to the upper section of the schedule, it will be seen that during the eleven-year period revenues increased from 376 million to 448 million dollars, or by approximately 19 per cent. With the general falling off of business in 1938, revenues declined some 28 million dollars below the 1937 level but in 1939 they increased approximately 33 million dollars and exceeded 1937 revenues by over 5 million dollars. Following 1929, revenues increased somewhat in 1930, fell off in 1931, 1932, and 1933 and recovered in 1934, each year thereafter except 1938 reflecting a substantial increase over the previous year. According to the report of the American Gas Association for December 1940, revenues for the year 1940 have reflected an increase of 39.3 million dollars, or 8.7%, over the revenues for the year 1939, such increase amounting to 24.5 millions for domestic sales, 5.1 millions for commercial sales, and 9.7 millions for sales to industrial and electric utility customers.

The classification of revenues shown in Schedule 1 reveals that revenues derived from sales to domestic consumers, including natural gas sold for househeating purposes, constitutes substantially more than half of the total revenues reported. In 1929 such revenues amounted to $223,000,000 and, while falling off to the extent of 5% at the low point of the depression, recovered rapidly and were $32,000,000 higher in 1939 than in 1929 and, as indicated above, increased $24,500,000 in 1940.

68 Commercial revenues have shown consistent improvement during the eleven-year period, except in 1933 and 1938, increasing from $32,000,000 in 1929 to over $50,000,000 in 1939, a gain of over fifty per cent. A further increase of $5,000,000 occurred in 1940.

Revenues from industrial sales, including natural gas used as fuel by electric utilities, amounted to $120,000,000 in 1929. During the depression years, revenues from this source declined to $75,000,000 in 1932, but subsequently increased and by 1937 were $26,000,000 higher than in 1929. In 1938 revenues from industrial and electric utility consumers amounted to $126,000,000 or $20,000,000 less than in 1937, but in 1939 recovered to $142,000,000 which amount, however, was still $5,000,000 below the 1937 total. As above indicated, revenues from this class of consumers for the year 1940 exceeded revenues for the year 1939 by almost $10,000,000.

It is thus indicated that the revenues of the natural gas industry in 1940 surpassed all previous levels by a substantial margin, with revenues from each class of consumers at the highest level in the history of the industry.

*Average Annual Revenue per M C. F. of Gas Sales.*—The average annual revenue per M C. F. of gas sold amounted to 38 cents in 1929, was 41.1 cents in 1932, 33.7 cents in 1937, 34.3 cents in 1938, and 33.8 cents in 1939, a net decrease of 4.2 cents since 1929. The average for 1940 was 33.9 cents.

The average revenue from domestic sales was 66.7 cents in 1929 and, after reaching 71.1 cents in 1932 and 1933, gradually declined to 68.6 cents in 1939, a net increase of 1.9 cents per M C. F. since 1929. A further decline to 66.8 cents occurred in 1940.

69 The average revenue per M C. F. of gas sold to commercial consumers has been following a steadily downward trend since 1929 and declined from 55.5 cents in 1929 to 46.1 cents in 1939, and to 45.2 cents in 1940, a net decrease of 10.3 cents per M C. F. since 1929.

The average for industrial and electric utility sales has declined from 20.1 cents per M C. F. in 1929 to 16.9 cents in 1939 and 1940, a decrease of 3.2 cents. However, the 1939 and 1940 average was almost one cent higher than the average of 16.0 cents for 1934.

*Gas Sales to Consumers (M C. F.).* Total gas sales reported for 1929 aggregated 991 million M C. F. In 1932, sales reached the low point for the depression period at 834 million M C. F. Subsequent years through 1937 witnessed rapid improvement in volume of sales and the 1937 total was 1,314 million M C. F. A decline of about 104 million M C. F. took place in 1938, but during 1939 the total again reached a new high level of 1,328 million M C. F. It is reported that in 1940 the volume of sales rose to the record level of 1,441 million M C. F. classified as follows: domestic—419 million M C. F., commercial—123 million M C. F. and industrial and electric generation—899 million M C. F.

The bulk of the large increase of 450 million M C. F. in volume of sales between 1929 and 1940 was brought about by increased sales to industrial consumers. Industrial consumption increased from 597 to 899 million M C. F., while commercial consumption increased from 59 to 123 million M C. F. and domestic consumption increased from 335 to 419 million M C. F. between 1929 and 1940. It may appear that fluctuations in industrial consumption since 1929 have merely reflected changes in economic conditions.
70 However, upon comparison with the fluctuations reflected in the Federal Reserve Board's index of industrial production (see Volume II, Schedule 14, of this exhibit) it is found that, using an index with 1929 as the base year in each instance, industrial consumption did not fall during the depression years to the lowest level reached by the index of industrial production, and in each year since 1934 the index of gas sales to industrial and electric utility consumers has been at a substantially higher level than the index of industrial production. This situation would appear to be accounted for in large part by expansion in the number of industrial customers since 1929, the number having increased from 22,000 customers in 1929 to 43,000 in 1939 and to 46,000 in 1940.

*Average Annual Gas Sales (M C. F.) per Customer.*—The data on average annual sales in M C. F. per customer shown in Schedule 1 are based on the number of customers at the end of each year.

Average annual consumption by domestic consumers declined during the period as a whole, the average M C. F. per customer having fallen from 60.5 in 1929 to 54.3 in 1939. However, the low point was 54.3 in 1934 and there were slight increases in 1935, 1936, and 1937, as well as in 1939, although in the latter year the average was still slightly below the 1937 figure. Increased consumption in 1940 raised the average for that year to 58.6 M C. F. per customer.

The average consumption per commercial customer was 175.6 M C. F. per year in 1929, fell to the low point of 164.2 in 1931, increased to 179.3 in 1932, declined to 170.4 in 1933, and increased thereafter in each year to 204.4 in 1937. It declined in 1938
71 to 192.3, but increased to 202.1 in 1939 and was 218.9 in 1940.

Average industrial sales in M C. F. per customer per year, fluctuated more sharply as would be expected in a period of changing economic conditions such as business has experienced since 1929. The sales per customer were 27,135 M C. F. in 1929, dropped to 17,440 in 1933 and recovered thereafter, reaching 21,294 in 1937. In 1938 the average consumption per customer declined to 18,044 M C. F., but in 1939 it increased to 19,673 M C. F. In 1940 the average declined to 19,550 M C. F. per customer.

*Number of Customers at End of Year.*—The data on number of customers at end of year shown in the lower portion of Schedule 1 reveals a substantial growth since 1929, the number of all customers increasing from 5,896,000 in that year to 7,454,000 in 1939, an increase of 1,558,000 customers. A further gain of 309,000 customers in 1940 brought the number of customers at the close of the year to 7,763,000, classified as follows: domestic—7,157,000, commercial—560,000, and industrial—46,000. In only one year, 1932, is a decline in total number of customers shown although it will be noted that the number of customers did not vary between 1930 and 1931.

Domestic customers increased in number from 5,540,000 in 1929 to 6,870,000 in 1939 and to 7,157,000 in 1940 a gain of 29% in the twelve-year period. Except in 1931 and 1932 there was a substantial increase in the number of domestic customers each year. The number of commercial customers reflected a marked growth during the period since 1929, the increase in this group being from 334,000 in 1929 to 560,000 in 1940, a gain of about 70 percent. The number of industrial customers has more than doubled, increasing from 22,000 in 1929 to 46,000 in 1940.

72 *Average Annual Revenue per Customer.*—The average revenue per domestic customer was $40.34 in 1929. The average had declined to $36.14 by 1934 but improved thereafter, rising to $38.06 in 1937. Following a decline in 1938, the average increased to $37.24 in 1939 and to $39.17 in 1940. Average revenue per commercial customer amounted to $97.54 in 1929. After declining to $85.83 in 1933, the average rose to higher levels in succeeding years and stood at $96.32 in 1937. Following a sharp decline in 1938 a partial recovery was recorded in 1939 for which year the average was $93.09. In 1940 the average increased to $98.96, establishing a record for the twelve-year period. Average revenues per industrial customer fluctuated considerably during the period under discussion. The average was $5,400 in 1929 but declined in $2,800 in 1932. Subsequent improvement was effected through 1937, the average for that year being $3,600. In 1938 the averaged dropped to $3,000, but recovered and stood at $3,300 in 1939 and 1940.

*Schedule 2.*—Schedule 2 contains comparative estimated income statements for the years 1931 to 1939, inclusive, of the companies for which revenues, gas sales, and customer data are presented in Schedule 1, and was taken from the same statistical bulletin of the American Gas Association.

It will be noted that the revenues from gas sales to consumers shown on the first line in Schedule 2 are in agreement with the revenue data shown in the upper portion of Schedule 1. Examination of Schedule 2 discloses that net operating income, designated as "Utility Operating Income" was $107,681,000 in 1939, or about $10,000,000 higher than that for 1938 although $4,000,000 lower than the 1937 figure of $111,811,000 which represented the peak for the nine-year period, and $2,000,000 lower
73 than the 1936 total. The low point following 1931, for which year net operating income was reported at $84,061,000, was reached in 1933 at $65,188,000. In 1934 net operating income recovered to $71,382,000 and increased to $93,508,000 in 1935.

Net income available for dividends and surplus followed the same general trend, starting at $51,103,000 in 1931, declining to $26,940,000 in 1933, rising rapidly to $74,989,000 in 1937, falling to $62,275,000 in 1938, and increasing to $72,152,000 in 1939. It will be noted that although net operating income in 1939 was lower than in 1936, net income available for dividends and surplus was higher in 1939 by $3,000,000, chiefly because of a decrease in interest and other deductions of almost $6,000,000.

Utility plant, which is reported only for the years 1934 to 1939, inclusive, increased from 1934 to 1938 by approximately $111,000,000. In 1939 utility plant was reported at $2,414,490,000, which was about $27,000,000 less than the amount reported for 1938.

*Chart 1.*—This chart shows at the right monthly sales of natural gas by months during the years 1929, 1939, and 1940. At the lower left are shown monthly revenues of the natural gas industry and, at the upper left, revenues of the manufactured gas industry and combined revenues of the total gas industry during the same years.

The revenues for the entire gas industry were higher in 1939 than in 1929, but showed a substantial increase in 1940 over 1939, due to increased revenues from sales of natural gas. Revenues from the sale of manufactured gas show generally a decline although 1940 revenues were higher than those for 1939. The
74 curves in the lower left section of the chart show that the revenues of the natural gas industry have increased substantially since 1929 and are at a new high level in 1940.

The group of curves on the chart at the right shows that the business of natural gas companies is highly seasonal in character,

as indicated by monthly fluctuations in the volume of gas sold. Volume of sales in recent years has been substantially greater than in 1929. Deliveries during all of 1940 were greater in volume than in 1939 and were at the highest level in the history of the industry.

*Chart 2.*—Chart 2 is presented in order to show the monthly trend of sales in 1940 as compared with 1939 both in total and by classes of revenue, i. e., domestic, commercial, and industrial. The chart shows that total monthly revenues in 1940 were substantially higher than in 1939, with the largest consistent gain being in domestic revenues, although industrial and commercial revenues, particularly in the first few months of 1940, also reflected a substantial increase over 1939. The February peak in revenues will be seen to have been accounted for by peaks in domestic and commercial revenues recorded in that month.

*Chart 3.*—Chart 3 is a photostatic copy of a chart taken from the American Gas Association's Statistical Bulletin No. 41, October 1940, after superimposing thereon an added index showing the trend of total natural gas sales since 1929 independently computed from data contained in the statistical bulletin above mentioned. The chart compares the American Gas Association's index of total natural gas consumption by domestic and commercial consumers with its index of manufactured gas consumption by all classes of consumers, and with the Standard Statistics index of industrial activity, the year 1926 being employed as the base year for all indexes. For the added index of total natural gas consumption by all classes of customers, the year 1929 has been taken as equal to 125 (the index for that year of natural gas sales to domestic and commercial consumers only).

75

The reason for the method employed by the American Gas Association of excluding industrial sales in its index of natural gas sales while including such sales in its index of manufactured gas sales is found by comparison of the relationship of industrial sales to total sales. In the case of manufactured gas, industrial sales for the twelve months ended December 1940, as reported in the American Gas Association's Monthly Summary of Gas Company Statistics for that month, amounted to approximately 62.8 million M C. F., or roughly 16% of total manufactured gas sales. However, sales of natural gas for industrial use in the same period, including sales for electric generation purposes, amounted to approximately 899 million M C. F., or 65% of total natural gas sales.

The chart shows that manufactured gas sales rose to 116% of the 1926 level in 1930, fell to somewhat less than the 1926 level in 1933, increased steadily thereafter through 1939, the index reaching about 120 in that year. Sales of natural gas for domestic and commercial consumption, however, have increased to a substantially greater extent since 1926 than manufactured gas sales. The index of such natural gas sales rose to 130 by 1930, dropped to 118 in 1933, which was still far above the 1926 level, advanced to about 146 by 1937, and receded to a moderate extent in 1938, but reached a new peak in 1939. Thus in 1939 the volume of natural gas sales for domestic and commercial use was
76 approximately 54% greater than in 1926, while manufactured gas sales volume was only about 20% greater.

The superimposed index for total natural gas sales fell sharply commencing in 1931 and was approximately similar to that for total manufactured gas sales in 1931 and 1932. Thereafter, however, the index of total sales rose much more abruptly than that for domestic and commercial sales through 1937. The index declined in 1938 but rose to a new peak of 168 in 1939, as compared with the 1939 index of 154 for domestic and commercial sales only.

It will be seen by comparison with the Standard Statistics index of industrial activity that although both the natural and manufactured gas industries experienced a decline in volume of gas sold during the depression years, the volume did not decline below the 1926 level, except to a slight extent in the case of manufactured gas, in contrast with the experience of industry in general, for which a decline in activity of about 45 per cent from the 1926 level was recorded at the lowest depth of the depression.

*Schedule 3.*—Schedule 3 shows the aggregate volume of natural gas production and consumption in the United States for the years 1926 to 1939, inclusive, and the portion of the total gas consumed which was transported in interstate commerce. From 1926 to 1939, natural gas production increased from 1,313 million to 2,477 million M C. F. Consumption, excluding gas used for field operations and manufacture of carbon black, increased from 704 million to 1,446 million M C. F. in the same period. Natural gas transported in interstate commerce increased from 209 million M C. F. in 1929 to 687 million M C. F. in 1939. In other words, since 1926 production has increased 88%, and consumption other than for field
77 use and carbon black manufacture has more than doubled. These increases were accompanied by an increase of over 225% in the quantity of natural gas transported in interstate com-

merce and, as will be seen from column (e) of the schedule, the proportion of the total quantity of natural gas consumed which is transported in interstate commerce has also been steadily increasing. Thus in 1939 this proportion was about 48% of total consumption, whereas in 1926 the proportion was approximately 30%, indicating the increased importance in recent years of natural gas as a commodity in interstate commerce.

*Schedule 4.*—Schedule 4 is presented for the purpose of disclosing the interstate movement of natural gas from and to the States of West Virginia, Ohio, and Pennsylvania, as indicated by data obtained from publications of the U. S. Bureau of Mines. Page 1 of the schedule shows that since 1926 the major portion of the gas produced in West Virginia has been delivered to other States and that the quantity of gas imported from other States has been negligible in proportion to the quantity produced in the State. Of the gas consumed within West Virginia the average consumption by domestic and commercial consumers has approximated one-third, and gas consumed by industrial customers, about two-thirds, of the total. The major portion of natural gas delivered to other States is accounted for by deliveries to the State of Ohio, with Pennsylvania, Kentucky, and Maryland ranking next in the order mentioned.

In 1939, the quantities of natural gas produced and consumed in the State of West Virginia, including receipts from and deliveries to other States may be summarized as follows in millions of cubic feet:

| | | | | |
|---|---|---|---|---|
| 78 | Produced in State | 159,226 | Consumed within State | 69,394 |
| | Received from other States | 12,482 | Delivered to other States | [1]102,314 |
| | | 171,708 | | 171,708 |

[1] Consists of deliveries to: Ohio—70,578; Pennsylvania—25,766; Kentucky—5,051; and Maryland—919.

Page 2 of Schedule 4 shows similar data for the States of Ohio and Pennsylvania. It is indicated that the combined natural gas production of both States was less than that of West Virginia in both 1938 and 1939, although in prior years the reverse situation prevailed, except from 1926 to 1929, inclusive. The data disclose that since 1926 the consumption requirements of the State of Ohio have far exceeded the production of natural gas in that State. With respect to Pennsylvania it appears that the quantity

of gas consumed has been somewhat in excess of that produced except in the years 1935 and 1936. It is of interest to note, with respect to both States, that the largest proportion of gas imported from other States is received from West Virginia.

*Ownership, Issuance, Prices and Yields of Securities of Natural Gas Companies*

*Schedule 5.*—Schedule 5 contains summarized data with respect to the outstanding securities of 43 natural gas companies.

In preparing this list an attempt was made to include all natural gas companies which had the following characteristics:

(1) Companies engaged in the production and transmission of natural gas and sales thereof at wholesale and to main-line industrial customers.

(2) Companies engaged in the transmission of natural gas and sales thereof at wholesale and to main-line industrial cus-
79 tomers. (3) Companies such as those described in (1) and (2) above which also conduct retail distribution operations.

(4) Companies so engaged which have annual operating revenues of $2,000,000 or more.

The purpose of selecting companies conducting operations of the type mentioned with revenues of $2,000,000 or more was to obtain a group of companies exhibiting generally the characteristics of Hope Natural Gas Company.

Schedule 5 sets forth for each of the 43 companies having the characteristics just mentioned the total amount of securities outstanding and a break-down of the total for each company according to classes of securities, i. e., bonds, debentures, notes and advances, preferred stock, and common stock. Also shown for each company and each class of security, based on the most recent information available, are the amounts of securities held by the public, by institutions, and by affiliates. Institutional holdings include securities held by banks, insurance companies, universities, etc.

In this connection, it should be pointed out that Schedules 5–A to 5–G, inclusive, contain details supplementing or supporting the data contained in Schedule 5. For example, Schedule 5–A contains certain information with respect to the bonds, debentures, and notes of the companies listed in Schedule 5 which are held by the public. Schedule 5–B gives details regarding the

identity of institutional holders of bonds, debentures, and notes of the companies and the amounts of individual holdings. Schedule 5–C lists the holdings of bonds, debentures and notes and advances by affiliates. Schedule 5–D shows certain information with respect to preferred stocks of the companies held by the public, and
80 Schedule 5–E sets forth the holdings of preferred stocks by affiliated interests. Schedule 5–F1 contains data on market prices, earnings per share and earnings-price ratios on those common stocks of the companies which are publicly held, and Schedule 5–F2 contains historical data with respect to the earnings and dividends applicable to such common stocks. Lastly, common stock holdings by affiliates of the companies are listed in Schedule 5–G.

The summary at Page 8 of Schedule 5 discloses that the 43 natural gas companies listed therein had securities outstanding as of the latest date for which information is available in the aggregate amount of $1,185,843,857. These outstanding securities consisted of bonds, debentures, and notes and advances aggregating $479,329,723, or 40.4% of the total, preferred stocks in the amount of $98,789,710, or 8.3%, and common stocks in the amount of $607,724,424, or 51.3%. The respective amounts of bonds, debentures, and notes and advances outstanding together with the relationship of each to the total amount of all securities outstanding, were as follows:

| | Amount | Percent of all securities outstanding |
|---|---|---|
| | | Percent |
| Bonds | $262,669,523 | 22.1 |
| Debentures | 45,350,000 | 3.8 |
| Notes and advances | 171,310,200 | 14.4 |
| Total | 479,329,723 | 40.4 |

Of the total amount of bonds, debentures, and notes and advances, affiliated interests held $196,519,200, or 41.0%, institutional holdings totalled $183,459,000, or 38.3%, and holdings by the general public amounted to $99,351,523, or 20.7%. Of the total of
$98,789,710 of preferred stocks outstanding, holdings by af-
81 filiated interests amounted to $35,661,000, or 36.1%, and public holdings amounted to $63,128,710, or 63.9%. Of the common stocks outstanding, amounting to $607,724,424, the public held $205,668,247, or 33.8%, and affiliated interests owned all but a fraction of the remainder.

Applying similar calculations to the total of all outstanding securities of the 43 companies listed in Schedule 5, it is found that the proportion held by the general public was 31.1%, and that held by institutional investors was 15.5%, while the proportion held by affiliated interests constituted 53.4%, or more than one-half of the total.

Inspection of Schedule 5 discloses that with respect to 28 of the 43 companies listed all of the securities outstanding were held by affiliates and institutions; leaving only 15 companies whose securities are available to the general public for investment purposes. The following summary discloses the magnitude of security holdings by affiliates and institutions in the 28 companies which have no securities outstanding in the hands of the general public:

| | Securities held solely by | | | Percent of total for 43 companies |
|---|---|---|---|---|
| | Affiliates | Institutions and affiliates | Total | |
| | | | | *Percent* |
| Bonds, debentures, etc. | $133,392,200 | $136,790,000 | $270,282,200 | 56.4 |
| Preferred stocks | 21,345,000 | 2,000,000 | 23,345,000 | 23.6 |
| Common stocks | 128,778,716 | 139,184,211 | 267,962,927 | 44.1 |
| Total | 283,625,916 | 277,974,211 | 561,600,127 | 47.4 |
| Number of companies | 19 | 9 | 28 | |

Of the remaining 15 companies whose securities are held by the general public in whole or in part, 9 companies have bond issues, 5 companies have preferred stock issues and 13 companies have common stock issues which are traded in the securities markets.

82 Of the outstanding securities of the above 15 companies, aggregating $624,243,30, it is of interest to note that holdings by affiliates amount to $172,316,250 and institutional holdings equal $83,779,000, leaving a balance of $368,148,480 representing holdings by the general public.

The foregoing calculations clearly demonstrate that a substantial proportion of the outstanding securities of natural gas companies is held by affiliated interests and institutional holders. To summarize, affiliated interests and institutional holders owned 79.3% of the bonds, debentures and notes, and advances, 36.1% of the preferred stocks, 66.2% of the common stocks and 68.9% of the total amount of outstanding securities of the 43 companies listed in Schedule 5. On the other hand, securities held by the general public constituted 20.7% of the bonds, debentures and notes,

63.9% of the preferred stocks, 33.8% of the common stocks and 31.1% of the total of all outstanding securities of the 43 companies referred to.

There is presented in an appendix following the written statement contained in this Volume I, a brief description of the history, operations, properties, and subsidiaries of each of the companies listed in Schedule 5.

*Schedule 5-A.*—Schedule 5-A lists the bond and debenture issues of the companies included in Schedule 5 of which any portion was held by the general public. The schedule also lists the bond issues of such companies which were outstanding in the hands of the public during any part of the period since 1937, but which had been subsequently retired. For each issue the schedule shows the name of the issuing company, a description of the issue, the amount of the public offering, the offering price, the approximate yield at offering price, the offering date, the date of retire-
83 ment, the total principal amount outstanding, the portion thereof held by the public and the ratings assigned by Moody's and Poor's publications. The schedule next shows the averages of high and low market prices for the years 1937 to 1940, inclusive, together with the approximate yields to maturity based thereon. This information is followed by data on market prices as of February 28, 1941, and yields to maturity based on such prices. The last two columns of the schedule show the respective current call prices for general and sinking fund purposes.

The first issue shown in Schedule 5-A consists of first mortgage 4% bonds, due 1951, of Arkansas Louisiana Gas Company. This issue, which carried Moody's and Poor's A rating, was offered to the public in 1936 at a price of 98 to yield 4.18% to purchasers. On the basis of average high and low market prices the yield to investors was slightly less than 4.00% in 1937 and 1938, and 3.69% in 1939. The bonds were retired in connection with refunding operations in October 1939, as indicated by Note (d) of Schedule 6, when the company sold privately one issue of short-term, and one issue of long-term serial bonds at par to yield 2.75% and 3.50% respectively, to purchasers.

The next two issues listed consist of pipe-line mortgage bonds of Cities Service Gas Company which were offered in 1927 and 1928 and retired in February 1939. The issues carried Moody's Baa rating and interest rates of 6% and 6½%, respectively, and during 1937 and 1938 were selling below par to yield from 6.36% to 7.06%. In December 1938 as indicated in Note (c) on Page 2 of Schedule

5-A, the above bonds were retired with proceeds from the private sale at par of $20,000,000 of first mortgage 3¾% bonds, due 1947–54 and $15,000,000 of 3¼% notes, due 1940–46, secured by like amount of first mortgage 3¼% bonds of the same maturity. In addition, the company issued $8,000,000 of 3½% debentures to its parent. A portion of the proceeds from the securities sold was applied to reduction of indebtedness due to the parent company.

The next issue consists of Consolidated Gas Utilities Corporation's first mortgage and collateral 6% bonds, due 1943, originally issued in 1928. The bonds carried Moody's B rating and were selling at prices to yield from 11.22% to 18.25% during the period 1937–1940. However, as of February 28, 1941, the bonds were selling on a basis to yield 5.60% and it is reported that in April 1941 the company sold privately a $6,500,000 issue of first mortgage 4% bonds, due 1956, and $900,000 of 5% debentures, due 1951. With the proceeds from the latter issues and from a bank loan of approximately $100,000, the company retired its outstanding 6% bonds.

The next issue listed is that of El Paso Natural Gas Company, consisting of first mortgage 4½% bonds, due 1951. These bonds were offered to the public in 1936 together with an issue of 4¾% convertible debentures, due 1946. The bonds, carrying Moody's Ba rating, were sold at 98½ to yield 4.64% to purchasers and were selling above par in 1937 and 1938 to yield 4.17% and 4.09%, respectively. The 4¾ debentures, carrying Moody's B rating, were offered to the public at par in June 1936 and were quoted at prices ranging from 137½ to 173 during the remainder of 1936. Approximately 80% of the issue was converted into common stock prior to the end of 1936, the conversion ratio being 60 shares of common stock for each $1,000 debenture. The market price of the debentures was apparently influenced by that of the common stock which ranged from 22¾ to 29¼ during 1936. The 4½% bond issue and the unconverted portion of the 4¾% debentures, together with an issue of first mortgage 4% bonds sold privately in 1937, were retired in January 1939 with the proceeds of a $4,000,000 issue of 3% serial notes, due 1939–43, and a $6,000,000 issue of first mortgage 3½% bonds, due 1953. The new bonds were sold privately at 99 to yield 3.59% to purchasers. In 1940 the company sold privately $3,000,000 principal amount of first mortgage 3% bonds, due 1955, at 98½ to yield 3.13%.

The next issue appearing on Schedule 5-A consists of first collateral 6% bonds, due 1943, of Houston Natural Gas Corporation. These bonds were publicly offered in 1928 at par. During the period 1937–1940, average market prices resulted in yields ranging downward in successive years from 5.70% to 4.71%. The bonds were retired in December 1940, the company in September 1940 having sold a new issue of first mortgage 4% bonds, due 1955. The new bonds were offered at par but were selling above call price at February 28, 1941, to yield 3.70% to purchasers. It is of interest to note that the new bonds were assigned Moody's Baa rating, representing an improvement over the Ba rating assigned to the prior issue.

Next in order on Schedule 5-A is a 5% debenture issue, due 1942, of Lone Star Gas Corporation. On the basis of the average market price of the debentures during 1937 up to the date of retirement in November, the yield to purchasers was 4.10%. The outstanding portion of this issue was retired with the proceeds from the sale in August 1937 of 1¾–4% unsecured notes, due 1938–42.

In August 1938, the company offered publicly, at a price of
86 102 to yield 3.33%, a $20,000,000 issue of 3½% convertible debentures, due 1953, carrying an A rating. The market price of these debentures during the years 1938–1940 resulted in yields ranging from 3.07% in 1938 to 2.80% in 1940. The 3½% debentures, together with certain bank loan notes, were retired in March 1941 with proceeds obtained from the sale to banks of $26,000,000 of 2–2¼% notes, due 1941–51, secured by pledge of substantially all of the company's holdings of securities of its subsidiaries.

From inspection of the data covering the various bond issues of Montana-Dakota Utilities Co. it appears that from 1937 until 1939 the company's bonds were selling at yields above 6.00%. However, in May 1939, the company made a public offering of first mortgage 4½% bonds, due 1954, and sold to banks $2,100,000 of 4¼% serial promissory notes, due 1940–46. With the proceeds the company retired all of its previously outstanding debt with the exception of the 4½% debentures which had been issued in 1936. The new 4½% bonds, which were assigned Moody's Baa rating, were offered at a price to yield 4.41%; but based on subsequent market prices the yield declined to 4.21% in 1939 and to 4.04% in 1940. In January 1941 the company retired its outstanding 4½% debentures, together with certain note indebtedness, through the issuance of 1½–3½% notes, due 1941–50, which were sold to

banks. In the same month the company retired its outstanding 4½% bonds, due 1954, which had been publicly offered in May 1939, together with an issue of 4½% bonds, due 1956, which had been sold privately in 1940. The latter two issues were retired with the proceeds from the sale in January 1941 of $7,500,000 of first mortgage 3½% bonds, due 1961, and $2,500,000 of first mortgage 2½% serial bonds, due 1942–49. Moody's Baa rating was
87 assigned to both issues. The new 3½% bonds were offered at a price of 103½ to yield 3.26% to maturity and at February 28, 1941, were quoted at 102¼ resulting in a yield of 3.34%. The shorter-term 2½% serial bonds were offered at prices resulting in yields ranging from 0.63% to 2.25%, according to maturity, and appear to have been sold privately inasmuch as a quotation on the issue as of February 28, 1941, was not available.

The next two issues consist of 5½% and 6½% first mortgage bonds of North Penn Gas Company, the former maturing in 1957 and the latter in 1942. Portions of the 5½% issue were sold to the public in 1927 and 1930, respectively, the 6½% issue having been offered in 1932. Both issues carry Moody's A rating. The 5½% issue was originally offered at discounts below par but in the period 1937–1939 was quoted at average prices in excess of par to yield slightly above 5.00%. The average price in 1940 was 99, resulting in a yield of 5.59%. However, at February 28, 1941, the issue was again selling above par to yield 5.36% to maturity. Quotations are not available on the 6½% issue.

Oklahoma Natural Gas Company in June 1936 issued $20,000,000 of first mortgage 4½% bonds, due 1951, rating Baa, at a yield of 4.64% and at the same time offered publicly a $10,000,000 issue of 5% convertible debentures, due 1946, rating Ba, at par. During the years 1937–1939 the yields on these issues reflected substantial declines and in 1939 the 4½% bonds were selling on a 3.92% yield basis and the 5% debentures were quoted at prices resulting in an average yield of 4.15%. In connection with refunding operations the company in August 1939 made a public offering of $17,000,000
88 of first mortgage 3¾% bonds, due 1955, of Baa rating, at a price of 103½ to yield 3.46% to purchasers. With the proceeds from the sale, together with proceeds from an $8,000,000 issue of unsecured 2¾% promissory notes, due 1941–46, and from the sale of 58,000 shares of $5.50 convertible prior preferred stock, the company retired its outstanding 4½% bonds and 5% debentures together with 22,200 shares of 6%, $100 par, convertible prior preference stock. In 1939, subsequent to their is-

suance, the new 3¾% bonds were selling on a 3.29% yield basis. In 1940 the average yield declined to 3.20%, and at February 28, 1941, the bonds were quoted at 2½ points above call price to yield 3.09%.

The next group of issues listed in Schedule 5–A is comprised of bond issues of Pacific Lighting Corporation and its subsidiaries, Southern California Gas Company and Southern Counties Gas Company of California. The first issue shown consists of 4½% debentures, due 1945, of Pacific Lighting Corporation. These debentures, carrying Moody's A rating, were publicly offered in 1935 at par. During the years 1937 and 1938 in which the debentures were outstanding they were selling at prices to yield 3.26% and 3.85%, respectively. The 4½% debentures then outstanding were called on April 5, 1939, the funds for their retirement having been obtained from the sale of $7,000,000 of 3% unsecured promissory notes, due 1940–49.

Southern California Gas Company in March 1931 offered a $12,500,000 issue of first mortgage 4½% bonds, due 1961, and in July 1935 sold $15,000,000 of first mortgage 4% bonds, due 1965. Moody's Aaa rating was assigned to both issues. In the years 1937–1940 the 4½% bonds were selling at prices considerably above par to yield approximately 4.00% throughout the period. The 4% bonds, which were offered in July 1935 at 101½ to yield 3.91%, were being sold during the years 1937–1940 on the basis of yields ranging from 3.74% in 1937 to 3.45% in 1940. Both issues were retired in November 1940 with the proceeds from a public offering in September 1940 of $30,000,000 of first mortgage 3¼% bonds, due 1970, at a price of 103½ to yield 3.07%. During the remainder of 1940 the bonds were selling on a 2.94% yield basis and at February 28, 1941, the bonds were quoted at 105¾ to yield 2.95%. It is reported that in April 1941 the company floated an additional $5,000,000 principal amount of first mortgage 3¼% bonds, due 1970, at a price of 104¼ to yield 3.03% to investors. The 3¼% bond issues offered in 1940 and 1941 were assigned Moody's Aa rating, whereas the prior bond issues had carried the Aaa rating.

Southern Counties Gas Company of California in January 1941 offered publicly $11,500,000 principal amount of first mortgage 3% bonds, due 1971, rating Aa, from the proceeds of which the company retired its outstanding first mortgage 4½% bonds, due 1968, also rated Aa, which has been sold to the public in 1928. It is of interest to note that whereas the 4½% bonds averaged

89.

yields of about 4.25% during the years 1937–1940, the new 3% bonds offered in January 1941 were sold to the public at a price of 101 to yield only 2.95%. The 3% bonds were quoted at 101⅜ as of February 28, 1941, to yield 2.93%.

The two issues next appearing in Schedule 5-A consist of first mortgage bonds of Panhandle Eastern Pipe Line Company. The first issue shown was offered in the principal amount of $24,000,000 in 1937 and consisted of 4% bonds, due 1952, carrying an A rating. The bonds were offered at a discount of 2½ points below par in April 1937 to yield 4.23% to maturity.
90 However, the yield declined from 4.06% in 1937 to 3.60% in 1940. In March 1941 the company retired the outstanding portion of the above 4% bond issue with proceeds from the sale in January 1941 of first mortgage bonds and notes. The company offered publicly $12,000,000 of 3% bonds, due 1960, rating A, at a price of 102, which resulted in a yield of 2.87% to purchasers. At February 28, 1941, the 3% bonds were quoted above par on a 2.92% yield basis. In addition to its public offering of first mortgage 3% bonds in January 1941, the company sold privately $6,250,000 of first mortgage serial bonds, due 1946–50, carrying interest rates of 1.65, 2.30%, according to maturity, and sold to banks $5,000,000 of serial notes, due 1942–45, with interest rates from 0.75, 1.50%, according to maturity.

The bonds of Southern Natural Gas Company listed in Schedule 5-A include two issues, consisting of first mortgage 4½% bonds, due 1951, carrying a Baa rating, and Adjustment Mortgage 6% bonds, due 1960, which have been assigned Moody's B rating. In addition there is shown in Schedule 5-A the amount of outstanding funded debt of the company's subsidiaries and the portion thereof held by the general public. The 4½% bonds were offered in November 1936 at par. During 1937 and 1938 the bonds were selling below par to yield as high as 4.87%, but in 1939 and 1940 the yields based on average market price were 4.12% and 3.87%, respectively. At February 28, 1941, the 4½% bonds were quoted at one point above call price to yield 3.77%. The 6% adjustment mortgage bonds were issued in 1936 pursuant to a reorganization plan to holders of the predecessor company's 6% convertible debentures, due 1944, and to holders of allowed claims on the basis of $500 of new adjustment
91 bonds (plus 48 shares of new class A stock) for each $1,000 principal amount of old debentures and $1,030 principal amount of such claims held (Moody's Public Utilities, 1937,

p. 205). The yield on the 6% adjustment bonds declined from 7.74% in 1938 to 6.19% in 1940 and at February 28, 1941, was 5.95%.

In this connection it should be mentioned that according to Holding Company Act Release No. 2740, dated May 3, 1941, Southern Natural Gas Company has filed a declaration with the Securities and Exchange Commission regarding the proposed sale of $13,000,000 of first mortgage pipe line sinking fund 3¼% bonds, due 1956, and $4,500,000 of 2½% serial notes, due 1942-47, and, in addition, 234,868 shares of $7.50 par common stock. The release indicates that the company proposes to apply the proceeds from the above financing to the retirement of the 4½% bonds, due 1951, which were publicly offered in 1936; a small issue of 4½% bonds, due 1952, which was privately sold in 1937; the entire issue of 6% adjustment mortgage bonds; and indebtedness of $450,000 on an outstanding 4% collateral note. The balance of the proceeds is proposed to be added to general funds.

The last group of issues on Schedule 5-A consists of first mortgage 6½% bonds, due 1939, of Southern Gas Utilities, Inc. (assumed by United Gas Pipe Line Company) and a 6% first mortgage bond issue and a 6½% debenture issue of Houston Gulf Gas Company, a subsidiary of United Gas Pipe Line Company. The latter company assumed the bonds of Southern Gas Utilities, Inc., in connection with the acquisition, following its organization in 1937, of all of the field gathering lines, main pipe lines, compressor stations, and natural gasoline plants of United Gas Public Service Company and its subsidiaries, except those of Houston Gulf Gas Company. After the divorcement from United Gas Public Service Company of the above properties, the company was merged with United Gas Corporation, which is the parent of United Gas Pipe Line Company. The 6½% bonds of Southern Gas Utilities, Inc., were redeemed in September 1938 prior to maturity. The bonds and debentures of Houston Gulf Gas Company, rated Ba and B, respectively, were sold at progressively declining yields during the years 1937-1940 and the 6% bonds, due 1943, were selling in 1940 above par to yield 5.00%, while the 6½% debentures, due 1943, were also selling above par to yield 5.82%.

It is reported that the bonds and debentures of Houston Gulf Gas Company were called for redemption in October 1940, in connection with proposed refunding operations by United Gas Corporation. The Commercial and Financial Chronicle (issue

of May 10, 1941, p. 3040) reports that United Gas Corporation has filed application under the Holding Company Act regarding the proposed private sale of $75,000,000 of 3½% first mortgage and collateral trust bonds, due 1958. In connection with such financing, it is indicated that Houston Gulf Gas Company will sell $5,400,000 of first mortgage 4% bonds, due 1961, to its parent, United Gas Pipe Line Company, and use the proceeds to discharge a like amount of indebtedness evidenced by a 2½% note held by First National Bank of Boston. The proceeds from the latter note apparently had been applied by Houston Gulf Gas Company to the redemption of its 6% bonds and 6½% debentures which are listed in Schedule 5–A. It is reported that Houston Gulf Gas Company will also issue an additional $1,300,000 of first mortgage 4% bonds, due 1961, in exchange for its $1,300,000 7% income note held by United Gas Pipe Line Company.

From the foregoing comments on the data presented in
93 Schedule 5–A with respect to yields on bonds of natural gas companies and the sequence of refunding operations conducted by each of the companies listed, with the single exception of North Penn Gas Company, it is readily apparent that the declining trend of interest rates and bond yields in recent years, to which attention has previously been directed, has exerted a strong influence upon the yields demanded by investors on bonds and other debt of natural gas companies. Without important exception, interest rates and yields on presently outstanding debt of such companies, or on bonds and other debt proposed to be issued in connection with which declarations have been filed, are at lower levels than ever before witnessed in the history of natural gas companies such as those listed in Schedule 5-A.

It may be noted that the total shown in Schedule 5–A under the column "Held by Public," $99,351,523, is in agreement with the total for bonds, debentures and notes held by the public indicated in the summary at Page 8 of Schedule 5.

*Schedules 5–B and 5–C.*—These schedules show the individual holdings by institutions and affiliates, respectively, of bonds, notes and debentures of the companies included in Schedule 5.

*Schedule 5–D.*—Schedule 5–D contains substantially similar information with respect to preferred stock of the companies listed in Schedule 5 which are held by the public as was shown in Schedule 5–A for bonds and debentures and notes of such com-

panies. However, Moody's publications do not assign ratings to capital stock issues; therefore, only Poor's ratings are given.

The schedule shows that 7 of the 43 companies listed in Schedule 5 had preferred stock issues outstanding in the hand
94 of the public during all or a portion of the period since 1937.

It will be seen that the entire issue of 7% preferred stock of El Paso Natural Gas Company is held by the public. Of the total amount of $1,479,700, about $600,000 par value appears to have been issued at date of organization in 1928 and the remainder through subsequent conversion of other securities. It is indicated that the stock has been selling above par during the entire period since 1937 and that at February 28, 1941, the bid price was equal to call price of 110, resulting in a yield of 6.36%. The dividend record on this stock indicates that dividends in arrears amounting to $26.25 per share were cleared up on June 22, 1936, since which date dividends have been paid regularly.

The next issue shown in Schedule 5-D consists of $50 par 7% preferred stock of Houston Natural Gas Corporation which appears to have been issued at organization of the company in 1928. The stock was selling somewhat below par in 1937 and 1938, but the market price subsequently improved and the average price was above par in 1939 and 1940. At November 30, 1940, the date of the most recent quotation available, the bid price of 55 equalled call price and the resulting yield was 6.36%.

Next in order is an issue of $100 par 6½% preferred stock of Lone Star Gas Corporation. The aggregate par value of this stock outstanding as of December 31, 1937, was $7,975,500. Funds for retirement of the entire issue and for other purposes were obtained from the sale in August 1938 of $20,000,000 of 3½% convertible debentures due 1953, and $11,300,000 of 2¾% serial notes, due 1939–45. During 1937 and 1938, prior to its retirement, the preferred stock was selling above call price of
95 $110 per share.

Next appear two issues of preferred stock of Montana-Dakota Utilities Co. consisting of $100 par stock with dividend rates of 5% and 6%, respectively. The two issues have equal preference as to assets and dividends. Neither series enjoyed a favorable market during the years 1937–1939 the market price in each instance being considerably below par throughout that period. However, by 1940 the market prices for both series had improved substantially over the 1937 level, although quotations

were still below par. At February 28, 1941, the market price for each series was the highest recorded during the four-year period, the 5% series being quoted at 90 to yield 5.56%, and the 6% series at 98½ to yield 6.09%.

The $7 dividend prior preferred stock of North Penn Gas Company consists of a small issue for which quotations could be obtained only for the year 1937. The yield in that year based on average market price of 89 was 7.87%. This stock has preference as to assets and dividends over an issue of $7 dividend preferred stock all of which is held by affiliates.

The next group of preferred stocks listed in Schedule 5–D is comprised of three issues of Oklahoma Natural Gas Company. The first issue consists of $100 par 6% convertible prior preference stock. This stock was issued in 1936 par for par in exchange for $2,220,000 of the company's 5% notes, due 1936–41. The market price of the 6% stock was below par in 1937 and 1938, but in 1939 the stock was selling above par to yield 5.84%. In conjunction with certain refunding operations conducted in the latter part of 1939, as described in Note (d) of Schedule 5–D, the entire issue of the 6% prior preference stock was retired, and the company sold 58,000 shares of $5.50 no par convertible prior preferred stock. The new stock was offered publicly at a price of 104 to yield 5.29% to purchasers. The market price of the new stock remained above par following its issuance, resulting in yields of 5.02% in 1939 and 5.07% in 1940. At February 28, 1941, the stock was quoted at 3¾ points above call price of 110 to yield 4.84% to purchasers. The third issue listed for Oklahoma Natural Gas Company consists of $50 par $3 dividend preferred stock of which there are 91,055 shares outstanding, this stock having been issued in 1933 in exchange with holders of preferred stock of Oklahoma Natural Gas Corporation under the plan of reorganization of the latter company. From its low level of $26 per share in 1937, the market price of this stock has gradually increased and at February 28, 1941, was equal to par value of $50 per share. It should be noted that the $3 dividend preferred stock is outranked with respect to preference as to assets and cumulative dividends by the $5.50 prior preferred stock. It also appears that dividends on the $3 dividend stock did not become cumulative until after January 1, 1939, and that the initial dividend on the stock was paid on March 15, 1939.

Pacific Lighting Corporation in May 1939 offered to exchange new $5 preferred stock with holders of the Company's outstand-

ing $6 preferred stock. The $6 preferred stock had been issued over a period of years and there were outstanding 196,665 shares as of December 31, 1938. The $6 preferred stock was selling above par in 1937 and 1938 to yield 5.84% and 5.79%, respectively. In 1939 up to date of retirement the average market price had exceeded call price of $105 per share resulting in a yield of 5.63%. Holders of 161,081 shares of the com-
97 pany's $6 preferred stock accepted the offer to exchange their holdings for $5 preferred stock, and the remaining 38,919 shares of the 200,000 shares of $5 preferred stock issued, were offered publicly at $102 per share to yield 4.90%. Following the issuance of the $5 preferred stock, the market price remained above par in 1939 and 1940. At February 28, 1941, the stock was quoted at 1¾ points above call price of 105 to yield 4.68%.

The last two preferred stocks listed in Schedule 5–D are issues of Southern California Gas Company, a subsidiary of Pacific Lighting Corporation. Both issues consist of $25 par 6% preferred stock, but the issues are distinguishable by the fact that the larger issue is identified as Series A stock. The generally lower market price associated with the Series A stock may be attributable to the fact that this stock as a class is entitled in liquidation merely to par value and accrued dividends in preference to the common stock, whereas the smaller issue of 6% preferred stock as a class has equal preference with the Series A stock in liquidation but is entitled, in addition to par value and accrued dividends, to share pro rata with common stockholders in the distribution of assets remaining after payment to common stock of its par value. Based on average market value the yield on the 6% preferred stock ranged from 4.84% in 1937 to 4.29% in 1940 and the yield on the Series A preferred stock declined from 5.12% in 1937 to 4.63% in 1940. At February 28, 1941, the 6% stock was quoted at 33, or one-fourth point below the price quoted for the Series A stock, resulting in yields of 4.55% for the 6% stock and 4.51% for the Series A stock. It will be noted that neither issue of preferred stock is subject to call.

It should be pointed out with respect to the data shown
98 Schedule 5–D that the indicated yields for the four preferred stock issues for which quotations are reported as being equal to or in excess of call price cannot be considered as representing the true yields for the respective issues. It is apparent that an investor purchasing preferred stock at a price

n excess of call price would be confronted with the risk that he issuing company may exercise its option to redeem the issue t a price less than that paid for the stock. Consequently, the act that a certain issue of preferred stock is subject to redemption ends to prevent the price of the stock from rising much beyond he call price and, conversely, tends to maintain the yield on uch stock at an artificially high level. The four preferred tocks currently quoted at prices at or above call price are the % issue of El Paso Natural Gas Company, the 7% issue of Houston Natural Gas Corporation, the $5.50 dividend prior preferred issue of Oklahoma Natural Gas Company, and the $5 ividend preferred issue of Pacific Lighting Corporation.

It will be noted that the amount of $63,128,710 shown as the otal of the column "Total Outstanding and Held by Public" in Schedule 5–D is in agreement with the amount designated as otal preferred stock holdings by the public in the summary at age 8 of Schedule 5.

*Schedule 5–E.*—It is believed that Schedule 5–E, which shows dividual holdings by affiliated interests of preferred stock of he companies listed in Schedule 5, requires no comment.

*Schedules 5–F1 and 5–F2.*—Schedule 5–F1 contains certain information relative to the common stock issues of the 13 companies sted in Schedule 5 which have common stock outstanding in the hands of the public. The schedule shows for each issue the name of the issuing company, the number of shares and book amount of common stock outstanding, the portion ereof held by the public, the par value, if any, and Poor's rating. ext are shown for the years 1937 to 1940, inclusive, the annual rnings per share, the averages of annual high and low market ices, and the earnings-price ratios, i. e., the per cent of earnings r share to market price, of the respective common stocks. nally, there is shown for each issue an earnings-price ratio sed on market price at February 28, 1941, and on earnings for latest year for which reported.

Schedule 5–F2 reflects, for each of the companies listed in edule 5–F1, annual operating revenues, together with annual nings and dividends per share of common stock, during the year period 1926–1940, insofar as such data are available in blications generally accepted as reliable sources of information. ge 1 of Schedule 5–F2 contains the data on operating revenues, nings and dividends by years set forth in columnar form under

appropriate captions. It will be noted that the date of incorporation appears immediately below the column headings applicable to the respective companies. A symbol immediately following the name of a company is keyed to an explanatory notation appearing on Page 2 of Schedule 5–F2. In certain instances it has been necessary, in computing earnings and dividends per share, to revise the reported figures retroactively to give effect to stock split-ups and stock dividends. Accordingly, for purpose of comparison, all data on earnings and dividends per share for the years preceding the year in which such changes occurred are based on the present common stock.

The earnings-price ratios of the respective common stock issues for the periods and on the basis indicated in Schedule 5–F1 are set forth in the following tabulation:

| Company | Common stock earnings-price ratios | | | | |
|---|---|---|---|---|---|
| | 1937 | 1938 | 1939 | 1940 | 2-28-41 |
| | *Percent* | *Percent* | *Percent* | *Percent* | *Percent* |
| Consolidated Gas Utilities Corp | 3.78 | | 11.70 | 17.75 | 17.14 |
| El Paso Natural Gas Co | 13.79 | 14.08 | 10.60 | 9.69 | 12.19 |
| Houston Natural Gas Corp | 11.10 | 14.35 | 18.77 | 25.40 | 20.64 |
| Interstate Natural Gas Co., Inc | 9.90 | 10.02 | 8.88 | 9.08 | 9.17 |
| Lone Star Gas Corp | 11.69 | 10.27 | 11.24 | 12.73 | 12.00 |
| Memphis Natural Gas Co | 16.63 | 13.96 | 15.74 | 15.75 | 14.90 |
| Montana-Dakota Utilities Co | 5.91 | 10.00 | 8.64 | 11.48 | 7.91 |
| Mountain Fuel Supply Co | 3.94 | 6.99 | 9.47 | 8.82 | 8.35 |
| National Fuel Gas Co | 6.10 | 6.36 | 7.52 | 9.69 | 9.61 |
| Oklahoma Natural Gas Co | 19.27 | 16.19 | 12.17 | 21.20 | 19.73 |
| Pacific Lighting Corp | 9.27 | 10.90 | 7.84 | 7.54 | 8.58 |
| Panhandle Eastern Pipe Line Co | | | 9.61 | 11.74 | 11.68 |
| Southern Natural Gas Co | | | 18.14 | 19.51 | 24.38 |

Comments pertaining to the above earnings-price ratios and to data appearing in Schedule 5–F2 relative to each of the companies listed are presented below in the order of their appearance.

*Consolidated Gas Utilities Corporation.*—The earnings-price ratio of this company's common stock was 17.14% as of February 28, 1941, based on market price of $1.75 per share and 1940 earnings of $0.30 per share. The ratio was somewhat higher in 1940, at 17.75%, which compares with the ratios of 11.70% in 1939 and 3.78% in 1937. Operations in 1938 resulted in a net loss of $0.47 per share; therefore no earnings-price ratio appears for that year. From information contained in Schedule 5–F2 it appears that the

ıny was incorporated in 1935 to take over the business of edecessor pursuant to a plan of reorganization. The com- therefore has an operating history of only five years, in two ıich operations resulted in a net loss. No dividends have been paid on the common stock since its issuance.

*El Paso Natural Gas Company.*—The common stock of this company had an earnings-price ratio of 9.69% in 1940, was somewhat lower than the ratio of 10.60% in 1939 but lerably lower than the ratios of 13.79% and 14.08% in 1937 )38, respectively. At February 28, 1941, the ratio was 12.19%, well above the ratio of 9.69% for 1940. From inspection data shown in Schedule 5–F2, it will be seen that earnings hare increased from $3.00 to $3.75 between 1937 and 1939, eclined to $3.29 in 1940, as contrasted with increased earnings 10 reflected for a majority of the companies represented in lule 5–F2. The company's operating revenues have increased $1,197,795 in 1930 to $6,380,311 in 1940. More than half of crease in revenues, however, has occurred subsequent to 1936. nitial dividend on the common stock was paid in 1936, in year the company disbursed $26.25 per 7% preferred share, ng up all arrears in preferred dividends from September 1, through June 1, 1936, since which data preferred dividends been paid regularly. Beginning in 1937 the company has annual dividends amounting to $2.00 per share on its com- tock.

*ston Natural Gas Corporation.*—The earnings-price ratio s company's common stock increased from 11.10% in 1937 0% in 1940 and at February 28, 1941, was 20.64%. The pres- mpany is a Texas corporation formed in 1940 which acquired operties and assets of the Delaware corporation of the same including the assets of the latter's subsidiaries. The Dela- corporation had been organized in November 1928 as a hold- mpany. Schedule 5–F2 discloses that consolidated operating revenues increased from $1,578,218 in 1929 to $3,128,613 in 1940, half of the increase having occurred subsequent to 1936. Earnings per common share have fluctuated con- bly. From $0.63 per share in 1935, earnings increased to n 1936 and to $1.72 in 1937, but declined to $1.22 in 1938. after earnings increased to $1.83 per share in 1939 and to per share in 1940. The initial dividend on common stock aid in 1936. From $0.50 per share in 1936 (erroneously as $0.75 in Schedule 5–F2) dividend payments on common

stock were increased to $1.25 in 1937, reduced to $0.80 in 1938 and to $0.40 in 1939, and increased to $1.20 in 1940. In 1937 the predecessor Delaware corporation distributed to common stockholders a stock dividend of 50% payable in common stock. Earnings and dividends per share for the years 1929–1936 prior to the stock dividend are shown in Schedule 5–F2 on the basis of the present common stock.

*Interstate Natural Gas Co., Inc.*—The earnings-price ratio of this company's common stock has fluctuated within a narrow range around 9.00% during the years 1937–1940 and was 9.17% as of February 28, 1941, based on market price of $23 and earnings for the year 1939 of $2.11 per share. The company was incorporated in 1926. Published figures show that its operating revenues increased from $3,101,950 in 1933 to $5,868,450 in 1939, the latest year for which information is available. The initial dividend on the company's common stock was paid in 1930 and the company also paid common dividends in 1931, the amount paid in each year being $0.25 per share. No common dividends were paid during the years 1932–1935, but in 1936 the company paid dividends of $1.75 per share. Dividend payments were increased to $2.60 per share in 1937, reduced to $1.75 in 1938, and in the following two years amounted to $2.00 per share. Earnings increased
103 from $0.35 per share in 1933 to $2.50 in 1937, but declined to $2.13 per share in 1938 and to $2.11 in 1939.

*Lone Star Gas Corporation*.—This company's common stock earnings-price ratio has fluctuated between limits of 10.27% and 12.73% during the four-year period 1937–1940. At February 28, 1941, the ratio was 12.00% as compared with 12.73% in 1940. Earnings during the four-year period have likewise fluctuated, declining from $1.14 per share in 1937 to $0.88 in 1938, and increasing to $0.98 in 1939 and to $1.17 in 1940. The company commenced operations in 1926 when it was organized to acquire control of Lone Star Gas Company. Operating revenues have increased from $10,983,055 in 1926 to $22,378,903 in 1940. Approximately forty percent of the indicated increase in revenues has occurred since 1935. Earnings and dividends per share for years prior to 1932 as shown in Schedule 5–F2 have been computed on the basis of giving effect to the 1929 stock split-up and the 1931 stock dividend described on Page 2 of Schedule 5–F2. Common stock earnings during the years 1926–1930 were generally higher than those since recorded and ranged from $1.13 to $1.58 per share in that period. During the depression years

ings declined to $0.53 per share but increased to $1.02 per
e by 1936 and, as stated above, were $1.17 per share in 1940.
mon dividends have been paid regularly since 1926 but the
unts paid fluctuated considerably during the ten-year period
ng in 1935. Dividends subsequently paid amounted to $0.60
share in the three years 1936–1938 and to $0.70 per share in
and 1940.

*emphis Natural Gas Company*:—The earnings-price ratio
reflected for this company's common stock during the years
1937–1940 has ranged from 13.96% to 16.63%, and was
14.90% at February 28, 1941. Earnings per share during
ears 1938–1940 did not vary appreciably but were at a lower
than in 1937 when earnings of $0.78 per share were the
st reported since inception of the company. The company
enced operations in 1928 and in 1931 reported earnings of
per share. During the depression years earnings fell to a
evel, being reported at amounts ranging from $0.36 in 1932
.22 in 1935. The company paid the initial dividend on its
on stock in 1930 and continued payments in the two suc-
ng years. No dividend payment was made in 1933, but
ends were resumed in 1934 and have been paid regularly
Annual dividend payments amounted to $0.10 per share
34 and 1935, $0.50 in 1936 and $0.60 in 1937. The amount
was reduced to $0.45 in 1938, but was increased to $0.50 in
nd to $0.55 in 1940.

*ntana-Dakota Utilities Co.*—The common stock earnings-
ratio of this company was 7.91% as of February 28, 1941,
mpared with percentages ranging from 5.91% in 1937 to
% in 1940. Earnings in 1940 showed a substantial improve-
over those in 1939, while the latter, in turn, were lower
1937 and 1938 earnings. The company has been in existence
1924, but its name was changed from Minnesota Northern
r Company to the present title in 1935, prior to which time
ompany was primarily a holding company. Published
gs figures on a comparable basis do not extend beyond 1933.
ver, the company's common dividend record for prior years
es that an initial dividend was paid in 1926, and that
nds were paid in increasingly larger amounts (after giving
effect to an 8 for 1 stock split-up in 1928 and a 6 for 1 split-
up in 1930) through 1931. No dividends were paid on
common stock after January 1, 1932, until December 1937
a dividend of $0.10 per share was paid. Dividends on pre-

ferred stock were paid regularly through January 1, 1932, but none were paid thereafter through 1936 when arrearages were cleared up under a preferred stock readjustment settlement whereby 12,889 shares of 5% preferred stock were issued in full satisfaction of accrued dividends through January 1, 1937. Since the latter date preferred dividends have been paid regularly. Operating revenues have increased from $3,357,676 in 1933 to $4,984,994 in 1940. In 1933 and 1934 operations resulted in substantial net losses. Earnings thereafter increased from $0.08 per share in 1935 to $0.65 in 1937, declined to $0.60 in 1938 and to $0.54 in 1939, but increased to $0.89 in 1940. Following the payment of $0.10 on the common stock in 1937, the company paid dividends of $0.32 per share in 1938, but lowered dividends to $0.24 per share in 1939 and 1940.

*Mountain Fuel Supply Company.*—The current earnings-price ratio reflected for the common stock of this company, based on market price at February 28, 1941, is 8.35%. This ratio compares with percentages of 8.82% in 1940, 9.47% in 1939, 6.99% in 1938, and 3.94% in 1937. It will be noted that earnings have shown gradual improvement since 1937. As disclosed by data in Schedule 5–F2, however, 1937 earnings were lower than those in 1936. Prior to 1936 earnings were at relatively lower levels and operations resulted in net losses in two of the six years represented. The company was organized in 1935 as successor by consolidation and merger to Western Public Service Corporation (incorporated in 1928) and its subsidiaries. Operating revenues have increased from $1,378,881 in 1930 to $3,388,133 in 1940, approximately one-half of the increase having occurred subsequent to 1936. Dividends were first paid in 1933 in the amount of $0.20 per share. The amount paid was reduced to $0.10 in 1934 and 1935. Dividend payments amounted to $0.25 in each of the three years 1936–1938, but were increased to $0.35 in 1939 and to $0.40 in 1940.

*National Fuel Gas Company.*—This company's common stock earnings-price ratio ranged from 6.10% in 1937 to 9.69% in 1940 and was 9.43% as of February 28, 1941. During the four-year period the company's earnings were lowest in 1938, at $0.83 per share, and highest in 1940, at $1.12 per share. Inspection of Schedule 5–F2 discloses that operating revenues during the years 1926–1930 were at a higher level then any since reported. For example, operating revenues amount to $19,418,690 in 1926, but were reported at $15,750,559 in 1935, and ranged from $14,713,09

1936 to $13,189,292 in 1938, and by 1940 had risen to $15,591,937, hich amount was still below the total recorded in 1935. The mpany's earnings record reflects a similar situation, with earn-gs averagng approximately $1.50 per share in the years 26–1930, $1.15 in the years 1931–1935, and $1.00 in the years 36–1940. The company's dividend record has been more con-tent, dividends of $1.00 per share having been paid in each ar of the 15-year period, with the exception of the years 1926 d 1935, when dividends of $0.80 and $1.35 per share, respec-ely, were paid. The company, which was incorporated in 22, made its initial dividend payment in 1909 and since that ne has paid dividends annually. In addition to paying cash vidends, the company declared a 100% stock dividend in 1922. The common stock was changed from $100 par to no par in 1927, 10 shares of no par stock being issued in exchange for each share of $100 par stock held. Earnings and dividends r the years 1926 and 1927 have been computed on the basis the present common stock.

*Oklahoma Natural Gas Company.*—The earnings-price ratio this company's common stock has varied considerably during e years 1937–1940. From 19.27% in 1937, the ratio declined to 19% in 1938 and to 12.17% in 1939, but increased to 21.20% 1940. At February 28, 1941, the ratio, based on earnings for e twelve months ended December 31, 1940, was 19.73%. Ratios the years 1937 to 1940, inclusive, are computed on the basis fiscal-year earnings. As stated in Note (g) of Schedule 5–F1, company's fiscal year was changed from the year ended No-mber 30 to the year ended August 31, effective in 1939. It will noted that during the four-year period 1937–1940, earnings common share declined from $2.06 in 1937 to $1.70 in 1938 l amounted to $1.75 in 1939, but increased substantially in 0, the earnings for the fiscal year ended August 31, 1940, being orted at $3.71 per share. Earnings reported for the twelve nths ended December 31, 1940, amounted to $4.02 per share. is indicated in Note (i) of Schedule 5–F2 that the company organized in 1933 as the successor through reorganization to business and property of Oklahoma Natural Gas Corporation. ce 1933 operating revenues have increased from $6,575,598 9,421,698, the increase in 1940 alone amounting to $1,200,000. mmencing in 1934 at $0.07 per share, earnings increased to 8 in 1935, and to $0.95 in 1936, since which year, as above icated, earnings have risen to a substantially higher level. The

company paid common dividends for the first time in 1939.
108 In that year the amount paid was $1.00 per share, which was increased to $1.10 in 1940.

*Pacific Lighting Corporation.*—Following 1938 when the earnings-price ratio of this company's common stock, at 10.90%, reflected an increase over the previous year's ratio of 9.27%, the ratio declined to 7.84% in 1939 and to 7.54% in 1940. In 1941 the current ratio, based on market price of the common stock at February 28, 1941, was 8.58%. It will be noted that earnings, which amounted to $4.10 per share in 1937, increased to $4.18 per share in 1938, but declined to $3.60 in 1939 and had fallen to $3.13 in 1940. From inspection of Schedule 5-F2 it will be seen that annual operating revenues were at a level of approximately $45,000,000 during the three years 1938–1940. Operating revenues in the peak year, 1936, amounted to $51,000,000. However, it should be noted that 1936 was the last full year of operation of the Los Angeles Gas & Electric Corporation, a subsidiary whose electric properties, which produced operating revenues of approximately $9,000,000 in 1936, were sold to the City of Los Angeles in May 1937. In the five years 1926–1930 earnings averaged $3.71 per share; in the five years 1931–1935, $3.39 per share; and in the last five years of the fifteen-year perior 1926–1940 average earnings rose slightly above the 1926–1930 level to $3.78 per share. The company, which was incorporated in May 1907 as the successor to Pacific Lighting Company (incorporated in 1886), has maintained a continuous record of common dividend payments since 1909. In addition to cash dividends on its common stock, the company declared stock dividends of 10% in December 1922 and 80% in December 1924 payable in common stock. Since 1928 the company has paid annual dividends of $3.00 per share on its common stock, except in 1935 and 1936, when amounts of $2.40 and
109 $2.85, respectively, were paid, and in 1937, when the amount paid was $3.50 per share. In 1927 the common stock was changed from $100 par to no par, and 10 no par shares were exchanged for each $100 par share held. Earnings and dividends per share for the year 1926 and 1927 have therefore been computed on the basis of the present common stock.

*Panhandle Eastern Pipe Line Company.*—None of the common stock of this company was held by the public prior to September 1939. Accordingly market quotations have been available only since that time. Based on average market price for the remainder

1939 the earnings-price ratio for that year was 9.61%. This o increased to 11.74% in 1940 and was 11.65% as of February 1941. Reference to Schedule 5–F2 discloses that the company incorporated in 1929 as Interstate Pipe Line Company, the sent title having been adopted in 1930. Operating revenues cted a moderate increase from $3,048,518 in 1934 to $3,611,865 1935, but increased by $2,400,000 in 1936. This increase is ibutable to the fact that the company on July 9, 1936, com- ced delivery of natural gas to Detroit, Michigan, under a con- t with Michigan Consolidated Gas Company (formerly De- t City Gas Company). Thereafter operating revenues con- ed to increase and in 1940 aggregated $13,535,453, which repre- s an increase since 1937 of approximately $4,000,000. Schedule 2 discloses that in 1934 and 1935, prior to commencement of ural gas deliveries to Detroit, the company's operations re- ed in substantial net losses. However, in 1936 the company orted net earnings of $1.44 per share, and earnings increased $3.57 per share in 1937. A considerable decline in earnings occurred in 1938, in which years earnings amounted to $2.84 per share. In 1939 earnings reported at $3.82 per share exceeded the 1937 amount, and in 1940 earnings increased 3.99 per share. The initial dividend on the company's com- stock was paid in 1937. Following the payment of $0.50 share in that year, common dividends were increased to $2.25 938, reduced to $1.50 in 1939 and increased to $3.00 in 1940.

will be seen from Note (k) of Schedule 5–F2 that Panhandle ern Pipe Line Company has outstanding two issues of $6 lend preferred stock. One issue consists of 10,000 shares of s B nonparticipating preferred stock. The second issue is esented by 100,000 shares of Class A participating preferred . By reference to Schedule 5–E it will be found that both rred stock issues are held by Columbia Oil & Gasoline Cor- ion, which company and Missouri-Kansas Pipe Line Com- together own 92.13% of the outstanding common stock of andle Eastern Pipe Line Company, as shown on Page 5 of dule 5–G. Dividends on both classes of preferred stock be- cumulative after January 1, 1936. Dividends thereon paid 37 included $6.00 per share in full payment of arrears for With respect to the Class A participating preferred stock provided that after common stock has received $1.50 per and Class A preferred stock $6.00 per share in dividends, rs of Class A stock are entitled to participate with holders

of common stock in any further distribution of earnings in the proportion of 25% to Class A preferred stock as a class and 75% to common stock as a class. The earnings per common share reflected in Schedules 5–F1 and 5–F2 are computed after giving effect to the participating feature of the Class A preferred stock.

It should be noted in this connection that a portion of the
111 common dividends paid by Panhandle Eastern Pipe Line Company in 1938 and 1940 constituted participating dividends under the above provision. For example, in those years, after dividend payments of $1.50 per share to common stock and $6.00 per share to Class A preferred stock, participating dividends of $0.75 in 1938 and $1.50 in 1939 were distributed on the common stock. The aggregate amounts of such participating common dividends were $546,489 in 1938 and $1,211,051 in 1940; consequently Class A preferred stock received participating dividends aggregating $182,163 in 1938 and $403,683 in 1940, equal to $1.82 and $4.04 per share, respectively, on the 100,000 shares of Class A preferred stock outstanding. The years 1938 and 1940 are the only years in which the company has paid participating dividends.

*Southern Natural Gas Company.*—The present $7.50 par common stock of this company has been outstanding only since May 1939 when it was issued in exchange with holders of the company's formerly outstanding Class A and B common stocks. The exchange was made on the basis of one share of new stock for each share of Class A stock held and one-half share of new stock for each share of Class B stock held. Based on average market price during the period in 1939 following its issuance, the earnings-price ratio of the new common stock was 18.14% in that year, increased to 19.51% in 1940, and was 24.38% as of February 28, 1941. It will be noted that earnings amounted to $2.01 per share in 1937 and declined to $1.49 in 1938, but increased to $2.55 in 1939 and to $3.17 in 1940. The company paid its initial dividend in 1936 when a dividend payment of $0.80 per share on the former Class A stock was made. In 1937 a dividend of $0.25 was paid on the former Class B stock. No
112 further dividends were paid on the Class B stock, but subsequent dividend payments on the Class A stock amounted to $1.20 in 1937 and $0.50 in 1938. Dividends amounting to $1.25 per share were paid in 1939 and 1940 on the new $7.50 par common stock. As indicated in Note (1) of Schedule 5–F2, the company was organized in 1935 to acquire the

operties of its predecessor, Southern Natural Gas Corporation ncorporated in 1928), pursuant to a plan or reorganization.

The foregoing historical analysis of operating revenues, earnings, and dividend payments of individual companies discloses following facts with respect to the 13 companies represented Schedules 5–F1 and 5–F2:

1. One company has paid no dividends on common stock since inception;

2. Three companies did not commence payment of common vidends until 1936; one until 1937; and one until 1939;

3. Three companies paid lower dividends in 1939 than in 38;

4. Five companies ceased the payment of dividends altogether ring the depression years or made substantially reduced vidend payments;

5. Preferred dividends of three companies were in arrears ring the depression years;

6. Three companies were organized to take over the properties predecessor companies which had been placed in receivership;

7. Common stock earnings of three companies were lower in latest year for which reported than in the preceding year;

8. Common stock earnings of two companies, which have been existence since 1926, reflect a decline in average earnings for five years 1936–1940 as compared with the five years 26–1930;

9. Operating revenues of two companies, which have been in stence since 1926, were lower in 1940 than in 1930.

In the following tabulation the above numbered paragraphs are keyed to the respective companies to which reference is made therein by the symbol "X" appearing ow the paragraph number:

| Company | Paragraph number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| lidated Gas Utilities Corp | X | | | | | X | | | |
| so Natural Gas Co | | X (1936) | | | X | | X | | |
| ton Natural Gas Corp | | X (1936) | X | | | | | | |
| tage Natural Gas Co., Inc | | | | X | | | X | | |
| Star Gas Corp | | | | X | | | | X | |
| phis Natural Gas Co | | | | X | | | | | |
| ana-Dakota Utilities Co | | | X | X | X | | | | |
| tain Fuel Supply Co | | | | X | | | | | |
| al Fuel Gas Co | | | | | | | | X | X |
| oma Natural Gas Co | | X (1939) | | | | X | | | |
| e-Lighting Corp | | | | | | | X | | X |
| ndle Eastern Pipe Line Co | | X (1937) | X | | X | | | | |
| ern Natural Gas Co | | X (1936) | | | | X | | | |

The above tabulation illustrates some of the factors which may influence investor appraisal of risk in connection with the purchase of common stock. The fluctuations noted in annual earnings-price ratios of the common stocks listed in Schedule 5-F during the period since 1937 may have been occasioned by one or more of these or other factors.

The foregoing comments indicate that caution must be exercised in appraising the significance of the earnings-price ratios exhibited for the above group of common stocks of natural gas companies. It also appears that the propriety of employing such earnings-price ratios in connection with the problem of a fair rate of return for Hope Natural Gas Company would be doubtful if consideration were not given to comparative analyses of operating revenues, earnings, and dividends, as well as to other factors indicative of the degree of risk confronting the enterprise.

*Schedule 5-G.*—This schedule contains a list of the individual holdings by affiliates of common stock of the natural gas companies listed in Schedule 5. None of such common stock is held by institutions, except that as will be noted by reference to Page 1 of Schedule 5, an amount of $451,697 of the common stock of Godfrey L. Cabot, Inc., was held by three educational institutions.

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*Schedule 6.*—Schedule 6 contains a compilation of bond issues sold by the natural gas companies listed in Schedule 5 during the period from January 1, 1935, to March 31, 1941, inclusive. The issues are grouped according to Moody's ratings, and for each issue there appear the name of the issuing company, the approximate offering date, a description of the issue, principal amount of the offering, net price and cost to company, and price and yield to public. In addition, the schedule shows the distribution of holdings of issues presently outstanding, i. e., whether held by the general public, or by institutional investors.

Under "Net Price to Company" are shown the net proceeds to the company per $100 of principal amount after underwriters' commissions and other expenses and in the adjoining column a percentage representing the annual cost of the funds borrowed calculated to maturity. Under "Price to Public" are shown the selling price to the public and in the adjoining column a percentage representing the annual yield to purchasers calculated to maturity.

All but two of the issues shown in Schedule 6 have been referred to in the preceding comments pertaining to the data con-

ained in Schedule 5–A. The issue of Mississippi River Fuel Corporation not previously described, which is the first issue listed in the lower section of Schedule 6 covering bonds privately sold, consists of $10,000,000 of first mort-age 4% bonds, due 1952. These bonds were sold privately in ebruary 1937 at an assumed price of par, the proceeds having een used for redemption of the company's previously outstanding irst mortgage 6% bonds, due 1944. As of December 31, 1940, 7,665,000 principal amount of this issue was outstanding, the ntire amount being held by institutions.

The second issue not previously described consists of $16,000,000 f first mortgage 3¼% bonds, due 1954, of Northern Natural as Company, which were sold privately in August 1939 at par o the group of insurance companies identified on Page 5 of chedule 5–B. The proceeds from the sale of the 3¼% bonds ere applied to the retirement as of August 1, 1939, of the com-any's outstanding first mortgage 4¾% bonds, due 1947, Series A ($11,120,000); first mortgage 4¼% bonds, due 1947, Series B $1,454,000), and 4½% debentures, due 1948 ($2,930,000). The ¾% Series A bonds and the 4¼% Series B bonds, both due 947, in the principal amounts of $16,000,000 and $2,000,000, re-pectively, had been sold privately in July 1935 to four insurance ompanies, the proceeds being used to retire bank loans and to rovide additional capital for construction. The 4½% deben-ures, due 1948, in the principal amount of $3,000,000, had been old privately in July 1938, it being reported that the proceeds ere used for general corporate purposes.

By inspection of Schedule 6 it will be seen that a considerable roportion of the bonds sold by the companies listed in Schedule during the period shown has been purchased by institutions, which affords an indication of the investment quality of the bonds of the natural gas companies represented. In addi-tion, it will be observed that the ratings assigned to a ajority of the bond issues of such companies which have been ublicly offered fall within the Baa to Aa groups. However, it of interest to note that in numerous instances the yield at which e issues shown in Schedule 6 have been sold is lower than oody's public utility bond yield average in the month of sale r the rating group in which the issue falls, as indicated below:

| Rating | Company | Offering date | Issue | Yield to public | Moody yield |
|---|---|---|---|---|---|
| | | | | *Percent* | |
| A | Lone Star Gas Corp | Aug. 1938 | Deb., 3½%, 1953 | 3.33 | 3.8 |
| A | Panhandle East. P. L. Co | Jan. 1941 | 1st Mtg., 3%, 1960 | 2.87 | 3.1 |
| Baa | Oklahoma Nat. Gas Co | June 1936 | 1st Mtg., 4½%, 1951 | 4.64 | 4.2 |
| Baa | Southern Nat. Gas Co | Nov. 1936 | 1st Mtg., 4½%, 1951 | 4.50 | 4.2 |
| Baa | Montana-Dakota U. Co | May 1939 | 1st Mgt., 4½%, 1954 | 4.41 | 4.3 |
| Baa | Oklahoma Nat. Gas Co | Aug. 1939 | 1st Mtg., 3¾%, 1955 | 3.46 | 4.0 |
| Baa | Montana-Dakota U. Co | Jan. 1941 | 1st Mtg., 3½%, 1961 | 3.26 | 3.8 |

[1] Moody's public-utility bond yield average in month of offering, per Schedule 4 of Volume II of this exhibit.

From Schedule 6 it will be observed that a characteristic feature of natural gas company bond issues, arising from the fact that the business of such companies is based on exploitation of a wasting resource, is their relatively short life to maturity. As will be noted by comparison of offering dates with maturities, the life of the issues generally does not exceed 15 years, whereas for electric utility bond issues the life is generally 25 or 30 years. For example, aside from the five debenture issues listed in Schedule 6, for which the period to maturity is 10 years in all but one instance, 16 of the mortgage bond issues shown have a life of 15 or 16 years. However, three issues have a life of 30 years, another of 20 years, and another of 19 years. The remaining five issues consist of mortgage bonds having short-term serial maturities.

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Finally, it will be noted that in the majority of instances the bonds listed in Schedule 6 are indicated as having been issued under indentures containing provisions relative to sinking fund requirements with a view toward the gradual retirement of the bonds over the life of the issue. The provision for serial maturities in respect of the five issues mentioned above accomplishes the same purpose as a provision for redemption through sinking fund operations.

*Schedule 7.*—Schedule 7 is presented for the purpose of disclosing certain details with respect to the issuance, terms, and purpose of issuance of outstanding note issues of the natural gas companies listed in Schedule 5 which were held by institutions. The schedule shows for each note issue, in columnar form and under appropriate captions, the name of the issuing company, the approximate date of issuance, a description of the issue including date of maturity, the principal amount of the issue, the purpose

ssuance, the interest rate, the identity of the lending institu-
s and the principal amount outstanding.

he purpose of the note issues which are indicated in the column
rpose of Issuance" as having been issued for refunding pur-
s, and in connection with which there is a reference to Schedule
as been described in the preceding comments pertaining to
dule 5–A.

will be noted that the total amount of all outstanding notes
n in the last column of the schedule is an agreement with the
amount indicated in the summary on Page 8 of Schedule 5
as representing notes held by institutions.

It is of interest to note that in many instances the com-
es have refunded previously outstanding mortgage debt
debentures carrying higher rates of interest by means of
t-term bank loans carrying low interest rates, and that in
al instances the loans have been made by groups of partici-
g banks and insurance companies. In the majority of in-
es the notes have been issued for refunding purposes. How-
in the case of Northern Natural Gas Company, a loan of
0,000 was obtained for new capital purposes. The loan was
enced by unsecured 2⅛% promissory notes, due 1940–46,
d to the Chase National Bank of New York in August 1939.
as reported that the proceeds from the loan were to be used
llows: $3,600,000 for construction of a 240-mile pipe line
Sioux City, Iowa, to Minneapolis; $1,200,000 for compressor
n property, lateral pipe lines, distribution system properties
bsidiaries and development costs, all directly incidental to
ipe line; and $1,200,000 to defray cost of additions and bet-
nts to the company's existing property, including distribu-
ystems of subsidiaries, etc.

*hedule 8.*—This schedule presents data on preferred stock
s of the natural gas companies listed in Schedule 5 which
sold in the period 1935–1941. The issues represented include
of Oklahoma Natural Gas Company and Pacific Lighting
ration and have been described in the preceding comments
ining to Schedule 5–D.

*edule 9.*—In this schedule are presented certain details with
t to offerings of common stock either to stockholders or to
the public by the natural gas companies listed in Schedule
5 during the period since 1935. Only three such offerings
have been made, the issuing companies including El Paso

Natural Gas Company, Panhandle Eastern Pipe Line Company, and Southern Natural Gas Company.

There appear for each of the issues listed in Schedule 9 the name of the issuing company and description of the issue, the offering date, the number of shares offered, the amount of the offering, the price to underwriters, the offering price, the earnings per share for the most recent twelve-months' period reported on prior to the offering date, and the ratio of the earnings for such period to the offering price.

The first issue listed in Schedule 9 consists of 60,000 shares of $3 par common stock of El Paso Natural Gas Company which were offered to the public in September 1936. As indicated in Note (a) of Schedule 9 the offering did not represent new financing by the company and the proceeds were not received by the company inasmuch as the shares constituted a portion of the company's outstanding common stock held by Engineers Public Service Company. The shares were sold to underwriters by the trustee for the latter company at a price of $19 per share. The underwriters offered the shares to the public at a price of $20 per share. On the basis of pro forma earnings of $2.21 per common share for the twelve months ended June 30, 1936, the earnings-offering price ratio was 11.05%.

The next issue shown in Schedule 9 is one consisting of 80,000 shares of no par common stock of Panhandle Eastern Pipe Line Company. A distribution of rights to subscribe to these shares was made in September 1939 to stockholders of Missouri-Kansas Pipe Line Company (holder of 42.05% of the presently outstanding common stock of Panhandle Eastern Pipe Line
120 Company) pursuant to a plan approved by the Court of Chancery for New Castle County, Delaware. The subscription warrants, which expired on October 27, 1939, entitled the holders thereof to purchase the stock at the subscription price of $25 per share. Holders of such rights acquired 78,715 shares, leaving 1,285 shares unsubscribed. It is reported that the unsubscribed shares were the subject of litigation as the result of an action instituted in October 1939 against Panhandle Eastern Pipe Line Company and others by Missouri-Kansas Pipe Line Company and Lucille I. Dammann. Based on earnings of $3.39 per share reported for the twelve months ended March 31, 1939, computed after giving effect to the participating feature of the company's Class A preferred stock, the earnings-offering price ratio of the common stock was 13.56%.

The last issue shown in Schedule 9 consists of 484,379 shares of .50 par common stock of Southern Natural Gas Company hich were offered for subscription by stockholders in January 41 in the ratio of 7/10 of one share of each share held. Of the ıares offered, Federal Water Service Corporation, as the holder 52.31% of the company's stock, purchased 253,372 shares, and her holders of subscription warrants purchased 227,782 shares, sulting in a total of 481,154 shares subscribed and 3,225 shares ısubscribed. The subscription price was fixed at $10 per share. n the basis of such price and earnings of $2.89 per share for the elve months ended August 31, 1940, the earnings-offering ice ratio was 28.90%. It was reported that $600,000 of the oceeds from the sale of common stock would be used to retire equal amount of 2½% notes issued November 22, 1940, and that the company contemplated employing a substantial portion of the remaining funds for development of gas supplies, for construction of pipe lines to transport gas oduced, for increasing the delivery capacity of its present stem and for extensions to serve other markets.

*ndard Oil Company (New Jersey)—*

*Natural Gas Interests and Long-Term Financing.*

*Chart 4.*—The purpose of this chart is to show the identity of companies in the natural gas industry which are affiliated with ndard Oil Company (New Jersey). The chart discloses that pe Natural Gas Company is a wholly owned subsidiary of Stand- Oil Company (New Jersey), and that other wholly owned ural gas subsidiaries of the latter company include The East o Gas Company, The Peoples Natural Gas Company, Hope struction & Refining Company, Hope Producing Company, and River Gas Company. It will also be seen that Standard Oil pany (New Jersey) holds controlling interests of 81.70% in oming United Gas Corporation and 53.96% in Interstate Nat- Gas Co., Inc. Lycoming United Gas Corporation, in turn, is parent of two wholly-owned natural gas subsidiaries, namely; York State Natural Gas Corporation and Keuka Construc- Corporation. In addition to the above interests, Standard Company (New Jersey) holds substantial minority interests in rado Interstate Gas Company (42.50%), Mississippi River Corporation (22.39%), and Natural Gas Pipeline Company merica (14.28%).

Domestic Coke Corporation, a nonnatural gas subsidiary of Standard Oil Company (New Jersey), is shown on the chart inasmuch as Hope Natural Gas Company, in its financial and statistical report to the Federal Power Commission for 1939
122 (F. P. C. Form No. 133), reported the purchase of 1,376,357 M C. F. of manufactured gas from that company. Gas Companies, Inc., whose stock is owned in equal percentages by Hope Natural Gas Company, The East Ohio Gas Company, and The Peoples Natural Gas Company, is included for the reason that its function is that of a service organization for the natural gas subsidiaries of Standard Oil Company (New Jersey).

*Schedule 10.*—This schedule was prepared for the purpose of presenting certain details of the physical characteristics, location of properties and volume of natural gas transactions of the natural gas companies which are controlled by Standard Oil Company (New Jersey) or in which that company holds a substantial minority interest. The companies are segregated into four groups, each group comprising a different system, except that group IV includes the natural gas companies in which Standard Oil Company (New Jersey) holds a minority interest.

The information presented for each system consists of a general description of the system, the names of the companies included therein, the percent of voting power of each company directly held by Standard Oil Company (New Jersey), and statistical data pertaining to the individual companies. Such data include miles of pipe line operated, classified according to function (i. e., production, transmission, or distribution); number and location of gas wells; volume of natural gas produced, purchased and transported; and sales of natural gas to other gas utilities at wholesale, to industrial main-line customers, and to other domestic, commercial, and industrial customers at retail.

It should be mentioned that the data on pipe-line mileage and gas wells presented in Schedule 10 are given as of July 1,
123 1938, and the statistics on volume of gas transactions are given for the twelve months ended June 30, 1938. However, it is believed that the information presented will be useful for the purpose of indicating in a general way the importance of the natural gas systems of Standard Oil Company (New Jersey) from a national standpoint.

By inspection of Schedule 10 it will be seen that fourteen companies are listed therein. However, two of the companies have been merged with other companies in the group since 1938. A-

cated in the schedule, the two companies referred to are Re- e Gas Company and Columbia Natural Gas Company. It will be seen that Lycoming United Gas Corporation has no physi- properties, its function being that of a holding company. Con- ently, only eleven of the fourteen companies represented in edule 10 are companies presently engaged in natural gas oper- ns. It is of interest to note that of the eleven companies so ged, there are eight companies which are among the group of atural gas companies listed in Schedule 5, as follows: Hope ral Gas Company; East Ohio Gas Company; Peoples Nat- Gas Company; New York State Natural Gas Corporation; rstate Natural Gas Co., Inc.; Mississippi River Fuel Corpora- ; Colorado Interstate Gas Company; and Natural Gas Pipeline pany of America.

lso of interest is the fact that the companies listed in Sched- 10 produced during the twelve months ended June 30, 1938, oximately 80,000,000 M C. F. of natural gas and in the e period, excluding duplications arising from intercorporate among the respective companies, sold approximately 275,000,- 000 M C. F. of natural gas for ultimate consumption. Although the 80,000,000 M C. F. of gas produced by the combined companies represented only 3.5% of the total nat- ural gas production in the United States in 1938, the 00,000 M C. F. of gas sold by them for ultimate consumption sented in excess of 20% of the total amount of gas consumed e United States in that year other than for field use and for facture of carbon black.

e companies listed in group I of Schedule 10 operate in West inia, Ohio, and Pennsylvania and deliver natural gas to oximately 714,000 customers in numerous cities of which land, Akron, Canton, Youngstown, and Marietta, Ohio; burgh and Altoona, Pennsylvania; and Clarksburg and ersburg, West Virginia, are the largest. This group is the one of the four groups shown in Schedule 10 the members ich are engaged in retail distribution.

e only operating companies in group II are New York State al Gas Corporation and Keuka Construction Corporation, wholly owned subsidiaries of Lycoming United Gas Corpo- . These companies operate in north central Pennsylvania outh central New York. Natural gas is produced and orted by these companies for sale to distribution systems ers in several cities and towns in central New York of

which Syracuse, Auburn, Cortland, and Ithaca are the more important.

Group III consists of two companies; namely, Interstate Natural Gas Co., Inc., and Hope Producing Company. These companies operate production facilities in fields in northeastern Louisiana and a main transmission pipe line extending from the gas fields through Louisiana and across Mississippi to Baton Rouge, Louisiana.

Group IV includes companies in which Standard Oil
125 Company (New Jersey) holds a minority interest. They are all important natural gas pipe-line companies and their operations are described in the Appendix to this Volume I of this exhibit. The companies include Mississippi River Fuel Corporation, Colorado Interstate Gas Company, and Natural Gas Pipeline Company of America.

*Schedule 11.*—In this schedule are presented certain details with respect to long-term financing by Standard Oil Company (New Jersey) since 1926. In November 1926, as indicated in Schedule 11, the company sold an issue of 5% debentures, due 1946, in the principal amount of $120,000,000 at a price of 100½ to yield 4.96% to purchasers. In February 1935 three series of debentures aggregating $37,000,000, due 1939–41, were sold at par to yield 3.25%, 3.50%, and 3.75%, according to maturity. In May 1936 an issue consisting of $85,000,000 of 3% debentures, due 1961, was sold at a discount of 2 points below par to yield 3.12%. It is reported that $55,000,000 principal amount of this issue was privately sold to Rockefeller Foundations. In July 1938, the company sold an issue of 2¾% debentures, due 1953, in the amount of $50,000,000, and 1¾–2½% serial notes, due 1943–47, in the amount of $35,000,000. The 2¾% debentures were offered at 99 to yield 2.83%, and the serial notes were sold at par. The latter serial notes were refunded in July 1940 with proceeds from the sale at par of $35,000,000 of 1¼–1½% serial notes, due 1943–47.

CHARLES W. KNAPP, JR.,
Charles W. Knapp, Jr.,
*Principal Examiner of Accounts.*

WASHINGTON, D. C., *May 26, 1941.*

Schedule No. 19

(Pages 1 to 76 omitted)

*Relation of Net Profit to Total Invested Capital for Leading American Industrial, Utility and Railroad Corporations*

[Unit: $1,000,000]

| | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *400 leading industrial corporations* | | | | | | | | | | | | | |
| Total invested capital | $25,114 | $26,559 | $28,743 | $29,397 | $28,050 | $26,049 | $25,632 | $24,902 | $24,701 | $25,150 | $26,182 | $26,588 | $26,900 |
| Net profit | $2,187 | $2,836 | $3,251 | $1,949 | $825 | $250 | $798 | $1,122 | $1,583 | $2,278 | $2,538 | $1,363 | $2,023 |
| Percent of net profit to total invested capital | 8.7 | 10.7 | 11.3 | 6.6 | 2.9 | 1.0 | 3.1 | 4.5 | 6.4 | 9.1 | 9.7 | 5.1 | 7.5 |
| *21 leading utility corporations* | | | | | | | | | | | | | |
| Total invested capital | $6,695 | $7,470 | $8,119 | $8,929 | $9,339 | $9,231 | $9,113 | $8,761 | $8,778 | $8,522 | $8,529 | $8,699 | $8,664 |
| Net profit | $447 | $526 | $587 | $604 | $588 | $514 | $482 | $443 | $462 | $473 | $467 | $440 | $464 |
| Percent of net profit to total invested capital | 6.7 | 7.0 | 7.2 | 6.8 | 6.3 | 5.6 | 5.3 | 5.1 | 5.3 | 5.5 | 5.5 | 5.1 | 5.4 |
| *42 leading railroad corporations* | | | | | | | | | | | | | |
| Total invested capital | $18,747 | $19,262 | $19,844 | $20,252 | $20,058 | $20,028 | $19,741 | $19,392 | $18,895 | $18,743 | $18,784 | $18,351 | $17,803 |
| Net profit | $1,082 | $1,153 | $1,269 | $990 | $658 | $462 | $556 | $543 | $560 | $681 | $609 | $424 | $598 |
| Percent of net profit to total invested capital | 5.8 | 6.0 | 6.4 | 4.9 | 3.3 | 2.3 | 2.8 | 2.8 | 3.0 | 3.6 | 3.2 | 2.3 | 3.3 |

Notes:

Total invested capital—includes funded debt, preferred and common stock, capital reserves and surplus.

Net profit—represents the amount available for fixed charges after depreciation, etc.

Source of above:

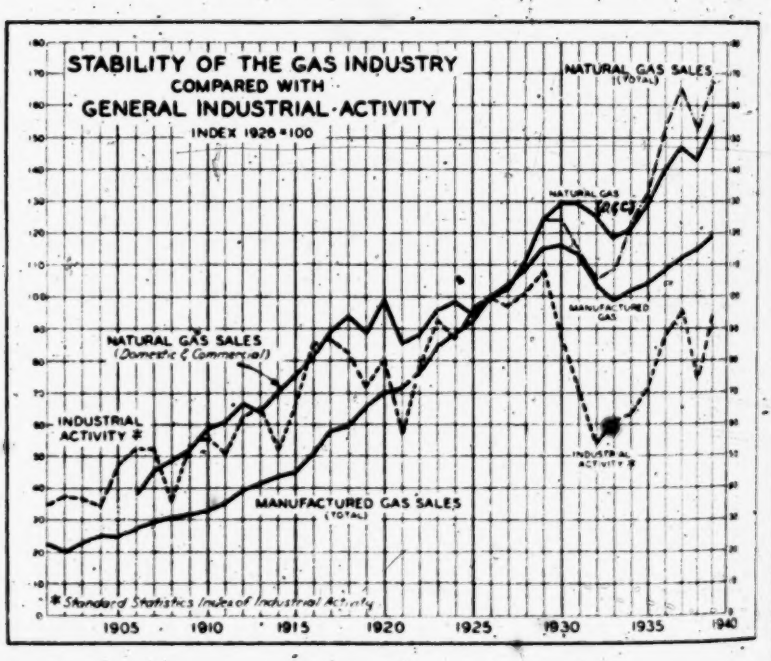
Standard Trade and Securities (published by Standard Statistics Co., Inc.), volume 6, number 9, section 2, dated Sept. 1940.

[Page 79 to 95 omitted.]

5 **EXHIBIT NO. 82-B, RATE OF RETURN, VOLUME III, F. P. C. WITNESS KNAPP**

[Pages 1 to 4 omitted]

## CHART NO. 3, STABILITY OF GAS INDUSTRY




Source: Annual Statistics of the Natural Gas Industry in 1939, Statistical Bulletin No. 41, October, 1940, Page No. 4, issued by the American Gas Association.

[Pages 6 to 42 omitted.]

*Bonds of natural gas companies sold in period from January 1, 1935 to March 31, 1941*

MOODY'S Aaa RATING

[Cost of money to issuing companies and yield to public]

| Source of data | Company | Approximate offering date | Issue | Principal amount | Net price to company | | Price to public | | Held by— | | Date called |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Amount | Cost, percent | Amount | Yield, percent | Public | Institutions | |
| (1) | Southern California Gas Co. (subsidiary of Pacific Lighting Corp.). | July 1935 | First & Ref. Mtg. 4%, 1965 | $15,000,000 | $98.09 | 4.11 | $101.50 | 3.91 | | | Nov. 1, 1940 (a). |

MOODY'S Aa RATING

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | Southern California Gas Co. (subsidiary of Pacific Lighting Corp.). | Sept. 1940 | First Mtg. S. F., 3¼%, 1970 | $30,000,000 | $101.13 | 3.19 | $103.50 | 3.07 | $30,000,000 | (b) | |
| (2) | Southern Counties Gas Company of California (subsidiary of Pacific Lighting Corp.). | Jan. 1941 | First Mtg. S. F., 3%, 1971 | 11,500,000 | (c) | (c) | 101.60 | 2.95 | 11,500,000 | (b) | |
| | | | | 41,500,000 | | | | | | | |

*Bonds of natural gas companies sold in period from January 1, 1935 to March 31, 1941*—Continued

MOODY'S A RATING

[Cost of money to issuing companies and yield to public]

| Source of data | Company | Approximate offering date | Issue | Principal amount | Net price to company | | Price to public | | Held by— | | Date called |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Amount | Cost, percent | Amount | Yield, percent | Public | Institutions | |
| (1) | Pacific Lighting Corporation. | Oct. 1935 | S. F. Debentures, 4½%, 1945 | $10,000,000 | $96.17 | 4.86 | $100.00 | 4.50 | | | Apr. 5, 1939 (1). |
| (1) | Arkansas Louisiana Gas Co. | July 1936 | First Mtg. S. F., 4%, 1951 | 10,000,000 | 93.29 | 4.62 | 98.00 | 4.18 | | | Oct. 30, 1939 (d). |
| (1) | Panhandle Eastern Pipe Line Co. | Mar. 1937 | First Mtg. S. F., A, 4%, 1952 | 24,000,000 | 95.02 | 4.46 | 97.50 | 4.23 | | | Mar. 5, 1941 (f). |
| (1) | Lone Star Gas Corp | Aug. 1938 | S. F. Conv. Debentures, 3½%, 1953. | 20,000,000 | 99.36 | 3.56 | 102.00 | 3.33 | | | Mar. 1, 1941 (e). |
| (1) | Arkansas Louisiana Gas Co. | Sept. 1939 | First Mtg. B, 3¼%, 1945-54 | 9,700,000 | 99.20 | 3.50 | 100.00 | 3.50 | | $9,700,000 | |
| (2) | Panhandle Eastern Pipe Line Co. | Jan. 1941 | First Mtg. & First Lien, S. F., B, 3%, 1960. | 12,000,000 | (c) | (c) | 102.00 | 2.87 | $12,000,000 | (b) | |
| | | | | 85,700,000 | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1).. | Oklahoma Natural Gas Co. | June 1936 | First Mtg. S. F., A, 4½%, 1951 | $20,000,000 | $94.89 | 4.99 | $98.50 | 4.64 | | | | Sept. 22, 1939 (i). |
| (1).. | Southern Natural Gas Co. | Nov. 1936 | First Mtg. P. L. S. F., 4½%, 1951. | 15,000,000 | 96.29 | 4.85 | 100.00 | 4.50 | $5,413,000 | $5,961,000 | | |
| (1).. | Montana-Dakota Utilities Co. | May 1939 | First Mtg. S. F., 4½%, 1954 | 9,000,000 | 96.01 | 4.88 | 101.00 | 4.41 | | | | Feb. 8, 1941 (g). |
| (1).. | Oklahoma Natural Gas Co. | Aug. 1939 | First Mtg. S. F., B, 3¾%, 1955 | 17,000,000 | 100.88 | 3.68 | 103.50 | 3.46 | 7,946,000 | 8,854,000 | | |
| (1).. | Houston Natural Gas Corp. | Sept. 1940 | First Mtg. S. F., 4%, 1955 | 3,500,000 | 95.19 | 4.44 | 100.00 | 4.00 | 3,500,000 | (b) | | |
| (2).. | Montana-Dakota Utilities Co. | Jan. 1941 | First Mtg. 2½% Serial, 1942-49 | 2,500,000 | (c) | (c) | Various | 0.63-2.25 | 2,500,000 | (b) | | |
| (2).. | Montana-Dakota Utilities Co. | Jan. 1941 | First Mtg., S. F., 3½%, 1961 | 7,500,000 | (c) | (c) | 103.50 | 3.26 | 7,500,000 | (b) | | |
| | | | | 74,500,000 | | | | | | | | |

MOODY'S Ba RATING

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1).. | El Paso Natural Gas Co. | June 1936 | First Mtg. S. F., A, 4½%, 1951 | $7,500,000 | $94.14 | 5.06 | $98.50 | 4.64 | | | | Jan. 16, 1939 (h). |
| (1).. | Oklahoma Natural Gas Co. | do | Conv. Debentures, 5%, 1946 | 10,000,000 | 95.72 | 5.56 | 100.00 | 5.00 | | | | Oct. 7, 1939 (i). |
| | | | | 17,500,000 | | | | | | | | |

MOODY'S B RATING

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1).. | El Paso Natural Gas Co. | June 1936 | Conv. Debentures, 4¾%, 1946 | $3,750,000 | $95.16 | 5.38 | $100.00 | 4.75 | | | | Jan. 16, 1939 (h). |
| (1).. | Montana-Dakota Utilities Co. | Oct. 1936 | Conv. Debentures, 4½%, 1946 | 2,300,000 | 96.19 | 4.99 | 100.00 | 4.50 | | | | Jan. 1, 1941 (j). |
| | | | | 6,050,000 | | | | | | | | |

*Bonds of natural gas companies sold in period from January 1, 1935 to March 31, 1941*—Continued

NO RATING ASSIGNED (ALL ISSUES PRIVATELY SOLD)

[Cost of money to issuing companies and yield to public]

| Source of data | Company | Approximate offering date | Issue | Principal amount | Net price to company | | Price to public | | Held by— | | Date called |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Amount | Cost, percent | Amount | Yield, percent | Public | Institutions | |
| (2) | Mississippi River Fuel Corp. | Feb. 1937 | First Mtg. P. L. S. F., 4%, 1952 | $10,000,000 | (c) | (c) | $100.00(k) | 4.00 | | $7,665,000 | |
| (2) | El Paso Natural Gas Co | Oct. 1937 | First Mtg. S. F., B, 4%, 1952 | 1,200,000 | (c) | (c) | 97.75 | 4.20 | | | Jan. 16, 1939 (h). |
| (2) | Southern Natural Gas Co | do | First Mtg. P. L. S. F., 4½%, 1952. | 650,000 | (c) | (c) | 97.75 | 4.71 | | 528,000 | |
| (2) | Cities Service Gas Co | Dec. 1938 | First Mtg. P. L. 3¼%, 1947-54 | 20,000,000 | (c) | (c) | 100.00 | 3.75 | | 20,000,000 | |
| (2) | El Paso Natural Gas Co | do | First Mtg. S. F., 3½%, 1953 | 6,000,000 | (c) | (c) | 99.00 | 3.59 | | 6,000,000 | |
| (1) | Northern Natural Gas Co | Aug. 1939 | First Mtg. S. F., A, 3¼%, 1954 | 16,000,000 | $98.84 | 3.35 | 100.00 | 3.25 | | 16,000,000 | |
| (1) | Arkansas Louisiana Gas Co. | Sept. 1939 | First Mtg. A, 2¾%, 1940-44 | 3,300,000 | 99.20 | 3.01 | 100.00 | 2.75 | | 3,300,000 | |
| (2) | El Paso Natural Gas Co | June 1940 | First Mtg. S. F., 3%, 1955 | 2,500,000 | (c) | (c) | 98.50 | 3.13 | | 2,900,000 | Feb. 8, 1941 (g). |
| (2) | El Paso Natural Gas Co | July 1940 | First Mtg. S. F., 3%, 1955 | 500,000 | (c) | (c) | 98.50 | 3.13 | | | |
| (3) | Montana-Dakota Utilities Co. | do | First Mtg. S. F., 4½%, 1956 | 1,200,000 | 101.06 | 4.40 | 104.00 | 4.16 | | | |
| (2) | Panhandle Eastern Pipe Line Co. | Jan. 1941 | First Mtg. & First Lien, A, 1½-2.30%, 1946-50. | 6,250,000 | (c) | (c) | 100.00 | 1.65-2.30 | | 6,250,000 | |
| | | | | 67,600,000 | | | | | | | |
| | Total | | | 307,850,000 | | | | | | | |

NOTE.—See Page 2 for Source of Data and Notes.

[Pages 44 to 50 Omitted]

Schedule No. 11

*Long-term financing by Standard Oil Co. (New Jersey)*

| Issue | Date of offering | Amount | Offering price | Yield to purchasers, percent |
|---|---|---|---|---|
| tures, Gold, 5%, 1946 | November 1926 | $120,000,000 | 100½ | 4.96 |
| Debentures, Series A, 3¼%, 1939 | February 1935 | 12,334,000 | 100 | 3.25 |
| Debentures, Series B, 3½%, 1940 | February 1935 | 12,334,000 | 100 | 3.50 |
| Debentures, Series C, 3¾%, 1941 | February 1935 | 12,332,000 | 100 | 3.75 |
| tures, 3%, 1961 | May 1936 | 185,000,000 | 98 | 3.12 |
| tures, 2¾%, 1953 | July 1938 | 50,000,000 | 99 | 2.83 |
| Notes, 1¾-2½%, 1943-47 | July 1938 | 35,000,000 | 100 | 1.75-2.50 |
| Notes, 1¼-1½%, 1943-47 | July 1940 | 35,000,000 | 100 | 1.25-1.50 |

000,000 Debentures, 3%, 1961, sold privately to Rockefeller Foundations.

e of data: Moody's Manuals of Investments, 1931-40 (Industrials).

U. S. GOVERNMENT PRINTING OFFICE: 1942

# Proceedings in the United States Circuit Court of Appeals for the Fourth Circuit

## No. 4979.

HOPE NATURAL GAS COMPANY, PETITIONER

*versus*

FEDERAL POWER COMMISSION, CITY OF CLEVELAND, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, RESPONDENTS

*On Petition for Review of Orders of the Federal Power Commission*

**July 18, 1942, petition for review filed and cause docketed.**

**NOTE.—The petition for review is in the words and figures following, to-wit:**

INDEX


| | |
|---|---|
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No. .....

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT.

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HOPE NATURAL GAS COMPANY,
*Petitioner,*

vs.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON, and
PENNSYLVANIA PUBLIC UTILITY COMMISSION,
*Respondents.*

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## PETITION FOR REVIEW.

---

*To the United States Circuit Court of Appeals for the Fourth Circuit and the Honorable Judges Thereof:*

Petitioner, Hope Natural Gas Company, hereinafter referred to as "Hope," being aggrieved by orders issued by respondent the Federal Power Commission, hereinafter referred to as the "Commission," in four proceedings under the Natural Gas Act (52 Stat. at L. 821 (1938), 15 U. S. C. Secs. 717-717w) to which Hope was a party, hereby files in this Honorable Court pursuant to Section 19(b) of said Act (15 U. S. C. Sec. 717r(b)) this its written petition to review said orders, praying that said orders be set aside. These orders, designated "Order Reducing Rates" and "Findings As To Lawfulness Of Past Rates," dated May 26, 1942 and served upon Hope on June 1, 1942, were issued by the Commission in four proceedings before it, all consolidated for hearing, entitled and bearing the Commission's docket numbers as follows:

*City of Cleveland, Complainant, v. Hope Natural Gas Company, Defendant,* Docket No. G-100;

*City of Akron, Complainant, v. Hope Natural Gas Company, Defendant,* Docket No. G-101;

*In Re: Hope Natural Gas Company,* Docket No. G-113;

*Pennsylvania Public Utility Commission, Complainant, v. Hope Natural Gas Company, Defendant,* Docket No. G-127.

In support of its petition Hope respectfully represents and shows:

(a)

**THE NATURE OF THE PROCEEDINGS AS TO WHICH REVIEW IS SOUGHT.**

The orders of the Commission of which review is sought fixed rates to be charged by Hope for its interstate sales of natural gas on and after July 15, 1942 and purported to determine the reasonable rates which Hope should have charged for such sales in the past. The proceedings in which these orders were entered were three complaint proceedings before the Commission and one investigatory proceeding instituted on the Commission's own motion, all involving the reasonableness of Hope's interstate natural gas rates, and hereinafter more particularly described.

Hope is a West Virginia corporation, with all of its properties located within the State of West Virginia. It was organized in 1898 and since that time it has continuously been and is now engaged in the production, purchase, transmission and sale of natural gas. In addition to distributing natural gas to consumers located in numerous West Virginia communities, it sells natural gas at or near the West Virginia state line to five companies which distribute natural gas to consumers located in Ohio and Pennsylvania. These five companies are The East Ohio Gas Company, which serves consumers in the Cities of Cleve-

land and Akron, Ohio, as well as numerous other Ohio communities, The River Gas Company which serves consumers principally in Marietta, Ohio and The Peoples Natural Gas Company, Fayette County Gas Company and The Manufacturers Light and Heat Company which serve consumers located in Pennsylvania. Promptly after passage of the Natural Gas Act in 1938 Hope, recognizing the Commission's jurisdiction over its interstate operations, filed its existing sales contracts with these five companies with the Commission as rate schedules pursuant to Section 4(c) of said Act (15 U. S. C. Sec. 717c(c)).

Respondent the Federal Power Commission is a commission created and established by Act of Congress (41 Stat. at L. 1063 (1920), as amended, 16 U. S. C. Sec. 792). By the Natural Gas Act the Commission is vested with certain regulatory powers over persons engaged in the interstate sale of natural gas, including the regulation of rates.

On July 6, 1938 respondent the City of Cleveland, Ohio, being then engaged in a natural gas rate controversy with The East Ohio Gas Company before The Public Utilities Commission of Ohio, filed a complaint against Hope with the respondent Federal Power Commission alleging, in general terms only, that the price charged by Hope to The East Ohio Gas Company for natural gas was excessive and unreasonable and that the determination of a proper rate would be of assistance to The Public Utilities Commission of Ohio in determining local distribution rates for The East Ohio Gas Company in Cleveland. The prayer of the complaint was for an investigation by the Commission and a finding that the existing rate was excessive and unreasonable and that a fair rate be fixed. This complaint, the first under the Natural Gas Act, was docketed by the Commission as No. G-100. Hope filed its answer denying the general charges in the complaint as to the unreasonableness of its rates and averring that the reasonableness of the Hope

rate to The East Ohio Gas Company had been investigated by The Public Utilities Commission of Ohio as recently as 1937, when it was approved by that Commission, and that it was again under investigation by that Commission.

On July 25, 1938 respondent the City of Akron, Ohio, filed a complaint in all respects similar to that filed by the City of Cleveland and this was docketed by the Commission as No. G-101. Hope filed an answer to this complaint similar to that filed in response to the complaint of the City of Cleveland.

On October 14, 1938 the Commission by order instituted a general investigation of all of Hope's interstate rates to determine whether any of them were unjust, unreasonable or discriminatory and if they were to fix and determine the proper rates. This investigation was docketed by the Commission as No. G-113.

On January 6 and 9, 1939 respondent the City of Cleveland filed an amendment to its original complaint and a petition in proceeding No. G-113 asking that the Commission's order of October 14, 1938 in proceeding No. G-113 be modified to include an investigation as to whether Hope had violated the Natural Gas Act by charging The East Ohio Gas Company an excessive rate since June 21, 1938, the effective date of the Natural Gas Act, and praying for a finding that the Natural Gas Act had been so violated. Hope filed answers to this amendment and petition alleging among other matters that since the institution of the original complaint by the City of Cleveland The Public Utilities Commission of Ohio in a proceeding involving The East Ohio Gas Company and the City of Cleveland had investigated the reasonableness of the price charged by Hope to The East Ohio Gas Company and by an order dated January 10, 1939 had found the existing rate to be fair and reasonable. This order was later affirmed by the Supreme Court of Ohio. *East Ohio Gas Company v. Public Utilities Commission*, 137 Ohio State 225 (1940). Thereafter on

March 10, 1939 the City of Cleveland filed supplements to its complaint as amended and to this petition by which it incorporated in the record the aforesaid decision of The Public Utilities Commission of Ohio and its appeal papers from such decision to the Supreme Court of Ohio, to which supplements Hope filed answers. The City of Cleveland's petition in proceeding No. G-113 and the supplement thereto were dismissed by the Commission by order of June 6, 1939.

On March 23, 1939 respondent Pennsylvania Public Utility Commission filed a complaint against Hope with the Commission praying that the Commission investigate the prices charged by Hope to The Peoples Natural Gas Company, Fayette County Gas Company and The Manufacturers Light and Heat Company and fix just and reasonable rates for the same. It also prayed that the Commission investigate and determine that Hope had since June 21, 1938 violated Section 4(a) of the Natural Gas Act. This complaint was docketed by the Commission as No. G-127 and Hope filed its answer thereto.

On October 3, 1939 the Commission issued an order consolidating said proceedings bearing its docket Nos. G-100, G-101, G-113 and G-127 for purposes of hearing, fixing a public hearing on December 4, 1939, requesting Hope to present at such hearing the statement of the cost of its property and plant which Hope was in the process of preparing and ordering Hope to "open and close these proceedings with the presentation of its evidence relevant and material to the question whether, in connection with any transportation or sale of natural gas subject to the jurisdiction of the Commission, any rate, charge or classification, demanded, observed, charged or collected by Hope, or any rule, regulation, practice or contract affecting such rate, charge or classification is unjust, unreasonable, unduly discriminatory or preferential." Hope thereupon filed its petition with the Commission for a reconsidera-

tion and rehearing of this order of October 3, 1939 upon the grounds, among others, that it arbitrarily, unreasonably, unlawfully and unconstitutionally attempted to impose the burden of proof upon Hope and denied it a fair hearing by requiring it to present proof of its innocence of violations of the Natural Gas Act simply because the complainants had filed general claims that it was guilty of such violations, instead of requiring it to meet only specific charges and specific evidence against it as these were produced. The Commission by its order of November 28, 1939 denied Hope's petition for a reconsideration and rehearing of its order dated October 3, 1939, but postponed the date of the commencement of public hearings to April 1, 1940.

By orders dated April 2, 1940 the Commission permitted the State of West Virginia and The Public Service Commission of West Virginia to intervene in the four proceedings previously consolidated and by order dated May 28, 1940 permitted the City of Toledo, Ohio, to intervene in the proceedings bearing docket No. G-113.

In April and June, 1940 hearings were held before the Honorable Edward B. Marsh, a Trial Examiner appointed and designated for the purpose by the Commission, at which hearings Hope was required pursuant to said order of October 3, 1939 to present evidence sustaining the reasonableness of its interstate rates although none of the respondents herein had made any specific claims as to the respects in which said rates were unreasonable and none had presented any evidence. By order dated December 20, 1940 the Commission denied a motion of the Cities of Cleveland and Akron for an immediate order reducing Hope's rates to The East Ohio Gas Company.

Further hearings were postponed by the Examiner or by the Commission from June, 1940 until March 3, 1941. Between that date and July 19, 1941 the taking of evidence was concluded by testimony of members of the Com-

mission's staff and rebuttal testimony presented by Hope. The other respondents and the interveners conducted some cross-examination but presented no other evidence.

On September 30, 1941 Hope filed an application with the Commission that Examiner Marsh be directed to serve upon it, promptly after its delivery to the Commission, a copy of any report that he might make in these proceedings to the Commission and that a reasonable time thereafter be fixed within which Hope should have an opportunity to file with the Commission its exceptions and objections to such report, and further requesting oral argument before the Commission *en banc*. By its order of October 3, 1941 the Commission denied Hope's application for service upon it of the Trial Examiner's report and fixed October 27, 1941 as the date for oral arguments.

On October 21, 1941 Hope filed a petition for a reconsideration and rehearing of the Commission's order of October 3, 1941 pointing out that those who are brought into contest with the Government in a quasi-judicial proceeding aimed at control of their activities are entitled to be fairly advised of what the Government proposes and to be heard upon its proposals before it issues a final command, that in these proceedings Hope had not yet been advised of what the Commission proposed, and that its denial of service of the Examiner's report denied it such advice. Hope also pointed out that it is the uniform practice of all important federal administrative bodies that when evidence is heard by a Trial Examiner the report of such examiner is served upon all interested parties who are given an adequate opportunity to take exceptions before the administrative body enters its final order; and that in departing from such uniform practice the Commission violated the provisions of the Natural Gas Act which require a full and fair hearing, satisfying not only the constitutional requirements of due process of law but also the basic principles of proper administrative procedure. By

an order dated November 4, 1941 the Commission denied this application for a rehearing.

On October 27, 1941 oral argument was had before the Commission *en banc*.

On June 1, 1942 the Commission served upon Hope its "Order Reducing Rates" and its "Findings As To Lawfulness Of Past Rates," dated May 26, 1942, which contain a number of findings, incorporate therein the Commission's Opinion No. 76, and are the orders herein petitioned to be reviewed by this Honorable Court.

Said "Order Reducing Rates" ordered Hope: (A) to decrease its interstate rates on an annual basis by not less than $3,609,857; (B) to charge its five interstate customer companies in the future average rates per thousand cubic feet of gas as follows: The East Ohio Gas Company, 29.5¢, The Peoples Natural Gas Company, 28.5¢, Fayette County Gas Company, 28.5¢, The Manufacturers Light and Heat Company, 28.5¢ and The River Gas Company, 35¢; (C) to file on or before July 1, 1942 new schedules of rates reflecting not less than such reduction and providing for such average rates; (D) to make such new schedules effective as to all bills based on meter readings made on or after July 15, 1942; and (E) on and after the effective date of such new schedules to cease and desist from making, demanding or receiving any rates and charges other than those so ordered until changed by order of the Commission. Said order required a substantial reduction in the average rates charged by Hope to each company except The River Gas Company, which latter rate was not changed by said order.

In said "Findings As To Lawfulness Of Past Rates" the Commission found, among other matters, that the interstate rates charged by Hope were unjust, unreasonable and excessive and therefore unlawful to the extent of $920,029 for the year 1939, $4,210,154 for the year 1940 and $3,609,857 annually since 1940, and that the rates

charged by Hope to said The East Ohio Gas Company were unjust, unreasonable, excessive and therefore unlawful to the extent of $830,892 during 1939, $3,219,551 during 1940, and $2,815,789 annually since 1940; and declared that "Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness of the interstate wholesale rates charged by Hope and other natural gas companies."

On June 24, 1942 Hope filed with the Commission its application for a reconsideration, rehearing and stay of the Commission's said findings and orders dated May 26, 1942 in accordance with Sections 19(a) and 19(c) of the Natural Gas Act (15 U. S. C. Secs. 717r(a) and (c)). In this application Hope urged before the Commission each of the objections to said findings and orders which Hope requests this Honorable Court to consider and which are hereinafter set forth as the points on which Hope intends to rely.

On July 9, 1942 the Commission served upon Hope its order dated July 7, 1942 denying Hope's aforesaid application for a reconsideration, rehearing and stay of the Commission's findings and orders dated May 26, 1942.

## (b)

## THE FACTS AND THE STATUTES UPON WHICH VENUE IS BASED.

Hope was a party to proceedings under the Natural Gas Act as hereinbefore set forth. Hope is located entirely within the State of West Virginia and has its principal place of business at Clarksburg, West Virginia, all within the circuit of this Honorable Court.

The statute upon which venue is based is Section 19(b) of the Natural Gas Act (15 U. S. C. Sec. 717r(b)) which, so far as here pertinent, reads as follows:

> "(b) Any party to a proceeding under this act aggrieved by an order issued by the Commission in

such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. * * *"

(c)

**THE RELIEF PRAYED.**

Hope respectfully prays:

(1) That a copy of this petition be forthwith served upon a member of the Commission in accordance with Section 19(b) of the Natural Gas Act (15 U. S. C. Sec. 717r(b)), and upon the other respondents, the City of Cleveland, the City of Akron, and the Pennsylvania Public Utility Commission, in accordance with this Honorable Court's Rule 27;

(2) That the Commission be required, in compliance with said Section 19(b) of the Natural Gas Act, to certify and file with this Honorable Court a transcript of the record upon which the orders complained of in this petition were entered, including the pleadings, motions, applications, exceptions, exhibits, testimony, report of the Trial Examiner, various orders of the Commission and the final opinion, findings and orders of the Commission in said proceedings before it bearing its docket Nos. G-100, G-101, G-113 and G-127;

(3) That this Honorable Court review the Commission's said "Order Reducing Rates" and "Findings As To Lawfulness Of Past Rates" dated May 26, 1942 in said proceedings before the Commission;

(4) That after such review this Honorable Court set aside said orders, and each of them, in whole; and

(5) That this Honorable Court grant Hope such other and further relief as may be required by law and the Constitution of the United States and such other and further relief as may be just and equitable.

(d)

## THE POINTS ON WHICH THE PETITIONER INTENDS TO RELY.

Hope intends to rely upon each of the separately numbered points set forth below. Without waiving any of these but solely for the convenience of this Honorable Court Hope states that the principal questions raised by these points are the following:

(a) Whether Hope was accorded a fair hearing in accordance with the Natural Gas Act and the Constitution.

(b) Whether a rate base which includes merely the depreciated book cost of Hope's property devoted to public service and ignores (i) the much larger original cost of that property, (ii) the much larger reproduction cost of that property, (iii) the 50% increase in the applicable price levels between the average dates that the property was constructed and the date the rate base was determined, and (iv) all evidence whatsoever of the much larger present value of that property is a valid rate base under the Natural Gas Act and the Constitution.

(c) Whether a rate base from which has been deducted a theoretical calculated depreciation reserve which is much greater percentagewise than the actual accrued deprecia-

tion in Hope's property determined by engineering observation, measurements and judgment and from the actual depreciation experience of the property is a valid rate base under the Natural Gas Act and the Constitution.

(d) Whether the amounts allowed in the rate base for unoperated leaseholds, additional capital expenditures and working capital were reasonable and proper allowances under the Natural Gas Act and the Constitution.

(e) Whether the Commission can under the Natural Gas Act and the Constitution fix the fair rate of return in accordance with what it found to be present day costs of money, while fixing the rate base in accordance with the varying costs of property over the last forty years, in view of the uncontradicted evidence that at the times said property costs were actually incurred the costs of capital for such enterprises were very substantially higher than present day capital costs.

(f) Whether in fixing rates for the future the Commission can under the Natural Gas Act and the Constitution wholly ignore Hope's operating experience in the past and particularly for the years 1937 to 1939, both inclusive, and base future rates solely on the abnormal war year 1940.

(g) Whether the Commission properly determined certain operating expenses of Hope.

(h) Whether the Commission under the Natural Gas Act has any authority whatever to consider or pass upon the lawfulness of Hope's past rates fixed by schedules filed with it; and, if it has such authority, whether it did not commit for past years the same errors on rate base, rate of return and operating expenses as it committed in fixing Hope's future rates, as well as additional errors.

The points which raise these and some other questions, upon each of which points Hope relies and each of which was urged before the Commission as an objection by Hope

in its application for a reconsideration, rehearing and stay which the Commission denied as hereinbefore set forth, are as follows:

## PART A

## As To The Commission's "Order Reducing Rates":

### Point 1.

The Commission failed to accord Hope the hearing required by Section 5(a) of the Natural Gas Act (15 U. S. C. Sec. 717d(a)) and the fair hearing required by the due process clause of Amendment V to the Constitution of the United States, particularly in putting on Hope the effective burden of proof to establish the justness and reasonableness of its interstate rates; in requiring that such burden be discharged by Hope without being apprized of the specific claims of the complainants, respondents the Cities of Cleveland and Akron and the Pennsylvania Public Utility Commission, or the Commission against it; in adopting and applying in said findings and orders after closing the taking of evidence the very rate base theories which during the taking of the evidence it rejected in its order of December 20, 1940 denying the motion of the Cities of Cleveland and Akron for an immediate order reducing rates; in refusing by its order of October 3, 1941 to serve upon Hope a copy of the report of its Examiner, who alone heard all the evidence; and in denying Hope any opportunity to except to said Examiner's report and be heard thereon or to know otherwise, prior to the Commission's orders served June 1, 1942, either the specific claims against its rates or the action thereon contemplated by the Commission. The Commission therefore erred in stating in its Opinion No. 76, incorporated by reference in said findings and orders, that "Each party to these proceedings was cognizant of the issues and was afforded ample opportunity to present evidence."

**Point 2.**

The Commission exceeded the power and authority delegated to it by the Natural Gas Act, and the power and authority constitutionally delegable to it by Congress, by adopting and applying a rule that whether rates for interstate sales of natural gas are unjust, unreasonable and excessive, and therefore unlawful, under Sections 4(a) and 5(a) of the Natural Gas Act (15 U. S. C. Secs. 717c(a) and 717d(a)) is to be determined solely and exclusively upon the rate of return earned upon a so-called rate base consisting of the book cost, adjusted only for so-called accounting errors, of the properties rendering such service, less a hypothetical depreciation reserve requirement, plus working capital, irrespective of the relationship of such adjusted book cost, or of such adjusted book cost less such hypothetical reserve requirement, to the original cost or the present value of such properties. Under this rule the Commission gave no consideration to the rate of return earned upon the present value, or upon the original cost or the actual legitimate cost or such cost less the actual existing depreciation, of such properties of Hope, all of which constitutes legislation and administration by the Commission in excess of its statutory and constitutional powers.

**Point 3.**

The Commission failed to discharge the duty imposed upon it by the Natural Gas Act, including Section 6(a) thereof (15 U. S. C. Sec. 717e(a)), of investigating, ascertaining and considering the fair value of Hope's properties, or the facts bearing thereon, in determining rates and charges for Hope's interstate sales. Neither the facts bearing on the fair value of Hope's property nor such fair value itself were at any time investigated, ascertained or considered by the Commission's staff or by the Commission.

**Point 4.**

The Commission erroneously construed the term "actual legitimate cost" as used in Section 6(a) of the Natural Gas Act and the term "original cost" as used in Section 6(b) of the Natural Gas Act (15 U. S. C. Sec. 717e(b)) as meaning the book cost of the property of a natural-gas company, adjusted only for so-called accounting errors, and erroneously failed to construe said terms to mean the amounts of money or its equivalent actually spent to construct the property. The Commission, erroneously, investigated and ascertained only such book cost of Hope's property and, erroneously, neither investigated nor ascertained the original cost or the actual legitimate cost of Hope's property.

**Point 5.**

The Commission erroneously construed the term "the depreciation therein" as used in Section 6(a) of the Natural Gas Act as meaning merely a hypothetical depreciation reserve requirement, calculated on accounting principles, applicable to the adjusted book cost of the property of a natural-gas company, and erroneously failed to construe said term to mean the depreciation actually existing in the property of a natural-gas company. The Commission, erroneously, neither investigated nor ascertained the depreciation actually existing in Hope's property, but merely calculated the depreciation reserve which it thought should appear on Hope's books and treated this revised book depreciation reserve as "the depreciation" in Hope's property. The Commission further erroneously construed said term "the depreciation therein" as including estimated sums which a natural-gas company may spend in the future to abandon its property. It erroneously included in its revised book depreciation reserve for Hope many millions of dollars which it estimated Hope would spend in the

future to abandon its properties and erroneously treated these estimated future operating expenses as "depreciation" in Hope's property.

**Point 6.**

The Commission erroneously construed Sections 4(a) and 5(a) of the Natural Gas Act to mean that a rate and charge which in any one year produced any amount in excess of 6½ per cent return upon the book cost, adjusted only for so-called accounting errors, of the properties rendering such service, less a hypothetical depreciation reserve requirement, plus working capital, is in such year not just and reasonable, but is unjust and unreasonable and hence unlawful, and that it is authorized to fix as the just and reasonable rate and charge for each year one which would produce only such return. The Commission rigorously applied this erroneous construction in considering and fixing Hope's interstate rates.

**Point 7.**

The Commission erred in not finding that the rates charged and received by Hope for the transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption are just and reasonable and erred in finding that they are unjust, unreasonable and excessive, and therefore unlawful, to the extent of $3,609,857 annually and in ordering that such rates be decreased (a) to reflect a reduction in revenues on an annual basis of not less than $3,609,857 and (b) to produce average rates for the following customer companies for the future as follows:

| | Average Rate Per M.c.f.—Cents |
|---|---|
| The East Ohio Gas Company | 29.5 |
| The Peoples Natural Gas Company | 28.5 |
| Fayette County Gas Company | 28.5. |
| The Manufacturers Light and Heat Company | 28.5 |

*(Findings (24), (25), (26), and Orders (A) to (E), inclusive, of "Order Reducing Rates").**

In not finding Hope's rates just and reasonable as aforesaid and in making said findings and order and the further findings and conclusions next italicized *(first (except 1st sentence), second, sixth (including table), eleventh and twelfth paragraphs under heading "Reasonable Earnings and Rates for the Future" of Opinion No. 76)*:

(a) The Commission proceeded unlawfully, exceeded its statutory and constitutional powers and erroneously construed the terms and provisions of the Natural Gas Act as set forth in Points 1, 2, 3, 4, 5 and 6 above;

(b) The Commission acted arbitrarily, unreasonably and without support in the evidence and erroneously incorporated, reflected and relied upon the erroneous findings and conclusions set forth in Points 8 to 21, inclusive, below; and

(c) The Commission prescribed rates and charges which do not permit Hope to earn the just compensation for the use of its property in public service, or the fair return on the present fair value of its property, to which it is entitled under Amendment V to the Constitution of the

* This and subsequent italicized references to said "Order Reducing Rates" and said "Findings As To Lawfulness Of Past Rates" and said Opinion No. 76 as incorporated thereto designate specific findings, orders, statements and conclusions of the Commission constituting error and herein urged as points of objection by Hope.

United States and which deprive it of its property without due process of law and take it for public use without just compensation in violation of said Amendment V, by reason of which said "Order Reducing Rates" and the rates and charges prescribed for Hope by the Commission therein are unconstitutional and void.

**Point 8.**

The Commission erroneously gave no consideration whatever to any of the extensive evidence in the record of the reproduction cost new, and less depreciation, of Hope's property devoted to its interstate service and erroneously rejected relevant evidence thereof consisting of agreements between complainants, the Cities of Cleveland and Akron, and Hope's affiliate, The East Ohio Gas Company, as to the reproduction cost new and less depreciation of such properties of Hope (Exhibits 121 and 122, Record, pp. 5927-5945). The Commission should have found, and erred in not finding, that the reproduction cost new of said physical properties (exclusive of property used to transport coke oven gas and property acquired by Hope from the Reserve Gas Company (excluded by agreement, see footnotes 3 and 4 of Opinion No. 76), leaseholds and working capital and without any allowance for the development of Hope's business or for going concern value or for discovery or other value of gas leaseholds) was $94,973,856 as of December 31, 1938, $94,894,072 as of December 31, 1939 and $95,882,315 as of December 31, 1940. It not only ignored each and every part of Hope's evidence thereon, but it ignored all other evidence of reproduction cost and failed to investigate, make and consider a reproduction cost estimate of its own. These actions of the Commission and each of them, and the findings and conclusions next italicized, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence and reflect the errors specified in Points 1, 2, 3, 4 and 5

above. *(Finding (7) of "Order Reducing Rates"; second, third, fourth, eighth and ninth paragraphs and footnote 6 under the heading "The Company's Estimates of Reproduction Cost and Trended 'Original Cost'" of Opinion No. 76).*

**Point 9.**

In arriving at its so-called rate bases the Commission erroneously ignored all evidence of the very great changes in price levels that occurred between the dates at which various items of Hope's interstate properties were constructed, beginning with 1891, and the present and erroneously failed to take notice of such changes as a matter of common and judicial knowledge. It should have found, and erred in not finding, that approximately one-half of Hope's properties in interstate service on December 31, 1938 were constructed prior to 1917 at an original cost of approximately $25,000,000 and the other half since that date at an original cost of approximately $45,000,000; that the original cost of said properties of approximately $70,000,000 adjusted to actual 1938 prices would have been more than $105,000,000 and that the present level of prices applicable to Hope's properties is on the average 50 per cent above the price levels at which said properties were actually constructed. The Commission not only ignored all evidence of the changing price levels but it did not itself investigate, determine or give any consideration to any change in the level of prices applicable to Hope's properties between the respective dates at which Hope's interstate properties were actually constructed and the date of its investigation, either as an important factor bearing upon the rate base or present fair value or the fair return or otherwise. The Commission's findings and conclusions as to Hope's evidence of the trended original cost of its properties as next italicized and its failure to make such findings and to investigate and consider any change in the

level of applicable prices, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence, and reflect the errors specified in Points 1, 2, 3, 4 and 6 above. *(Finding (8) of "Order Reducing Rates"; fifth (except the first two sentences), sixth, seventh, eighth and ninth paragraphs and footnote 6 under the heading "The Company's Estimates of Reproduction Cost and Trended 'Original Cost'" of Opinion No. 76).*

**Point 10.**

The Commission erroneously did not find either the original cost or the actual legitimate cost of Hope's properties. The Commission should have found, and erred in not finding, that the original cost and the actual legitimate cost of Hope's properties (exclusive of distribution properties, property used to transport coke oven gas, property acquired by Hope from the Reserve Gas Company and working capital) was $69,735,638 as of December 31, 1938, $69,609,811 as of December 31, 1939 and $70,574,297 as of December 31, 1940. The Commission's failure to make such findings and its findings and conclusions as to Hope's evidence of the original cost of its property as next italicized, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence, and reflect the errors specified in Points 1, 2, 3, 4 and 6 above. *(Findings (9) and (10) of "Order Reducing Rates"; second paragraph under the heading "Actual Legitimate Cost"; first (except the 1st and 5th sentences), third (except the (1st and 2nd sentences), fifth (1st sentence only), seventh (last sentence only), eighth, ninth (first and last sentences only), tenth, eleventh, thirteenth (except table), fourteenth (last 3 sentences only) and fifteenth (except the 1st sentence) paragraphs and Table A under the heading "The Company's Estimated 'Original Cost'"; and each paragraph under the heading "Impropriety Of Including In Rate Base Items Previously Charged To Expense" of Opinion No. 76).*

**Point 11.**

The Commission erroneously found what it termed the "actual legitimate cost" of Hope's property (exclusive of distribution property, property used to transport coke-oven gas, and unoperated acreage) to be Hope's "Gross Investment in Gas Plant in Service" as follows:

| | |
|---|---|
| As of December 31, 1938 | $51,207,621 |
| As of December 31, 1939 | 51,019,585 |
| As of December 31, 1940 | 51,957,416 |
| For the Future | 51,957,416 |

*(Finding (11) of "Order Reducing Rates").*

Said findings and the findings and conclusions next italicized, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence, and reflect the errors specified in Points 1, 2, 3, 4, 6 and 10 above. *(Table A; all paragraphs and table (except findings as to net additions in 1939 and 1940) under heading "Actual Legitimate Cost or Gross Plant Investment"; last 2 sentences of first paragraph and the subsequent text and table under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).*

**Point 12.**

The Commission erroneously found what it termed the "actual existing depletion and depreciation" in Hope's property (exclusive of distribution property, property used to transport coke oven gas and unoperated acreage) to be as follows:

| | |
|---|---|
| As of December 31, 1938 | $21,188,122 |
| As of December 31, 1939 | 21,737,823 |
| As of December 31, 1940 | 22,328,016 |
| For the Future | 22,328,016 |

*(Finding (12), of "Order Reducing Rates"; table and last paragraph under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).*

The Commission should have found, and erred in not finding, that the "actual existing depletion and depreciation" in Hope's said properties, and "the depreciation therein," was no more than approximately 34.5 per cent of the undepreciated value of the physical properties and 71.5 per cent of the original acquisition cost of the operated leases (or an average of 35.15 per cent as of December 31, 1938, 36.06 per cent as of December 31, 1939 and 36.71 per cent as of December 31, 1940). Said findings and the further findings and conclusions next italicized, and said failure to make such findings, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence and reflect the errors specified in Points 1 to 6 and 8 to 11, inclusive, above. *(First (1st sentence only), second, third and fourth paragraphs under the heading "Depletion and Depreciation"; first (2nd sentence only), third (last sentence only), fourth (1st sentence only), fifth, sixth (1st, 3rd and last sentences and footnote 20 only), seventh, eighth (first 2 sentences, footnote 22 and first 2 sentences after "(3)" only), ninth, tenth, and twelfth paragraphs under the heading "The Required Reserve For Depletion and Depreciation" and second sentence under heading "Rate Base" of Opinion No. 76).* Said findings also:

(a) Disregard all the evidence as to the actual existing depreciation and depletion in said properties as determined by observation, measurement, engineering and operating judgment, the actual depreciation experience of said properties and the decline in gas content, in favor of hypothetical accounting reserves, applicable only to book costs, based on estimated annual depreciation and depletion rates and on estimated accruals necessary to provide for the future expense to abandon properties;

(b) Apply erroneous estimated annual rates of depreciation and depletion based on estimated service lives of short duration and on estimated depletion percentages which disregard Hope's actual experience on depreciation,

depletion and salvage and which have no foundation in fact; and

(c) Calculate excessive depreciation and depletion reserves by application of the aforesaid erroneous annual rates and by assuming, contrary to the facts and to the evidence, that the "existing depletion and depreciation" in the properties purchased by Hope at the time of their purchase was measured by the book depreciation and depletion reserves of the companies from which Hope purchased such properties; that Hope's book reserves measure the "actual existing depletion and depreciation" in Hope's autos and trucks and drilling and cleaning equipment; that the hypothetical reserve for depreciation of Hope's communication equipment should be sufficient at the present time not only to retire all of the present communication equipment at the end of its estimated useful life but all of the communication equipment which Hope has ever retired from the beginning of business to date; that each field line will be abandoned upon the exhaustion of the particular gas pool areas to which the Commission assigned it as these alleged pools existed at December 31, 1938; that field lines will handle gas only from wells existing on December 31, 1938; that the depletion of 772 existing wells can be based on the rate of gas production from all of Hope's abandoned wells plus its existing 3300 wells; that an estimated amount for the future cost of abandoning properties constitutes "existing depletion and depreciation" and that there is additional existing depletion of over $2,100,000 in such of Hope's properties as were originally capitalized on its books, including therein the construction costs of only 772 wells, by reason of the fact that in the future it will cost an estimated $3,285,000 to abandon Hope's 3300 existing wells.

**Point 13.**

The Commission erroneously found that its purported "actual legitimate cost" of Hope's property (exclusive of distribution property, property used to transport coke oven gas and unoperated acreage), less its purported "actual existing depletion and depreciation," is as follows:

| | |
|---|---|
| As of December 31, 1938 | $30,019,499 |
| As of December 31, 1939 | 29,281,762 |
| As of December 31, 1940 | 29,629,400 |
| For the Future | 29,629,400 |

*(Finding (13) of "Order Reducing Rates;" table and last paragraph under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).*

Said findings, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence, and reflect the errors specified in Points 1, 2, 3, 4, 5, 6, and 8 to 12, inclusive, above. The Commission should have found, if it desired to find the original cost or actual legitimate cost of said properties of Hope, less actual existing depletion and depreciation, and erred in not finding the same to be $44,781,361 as of December 31, 1938, $44,083,535 as of December 31, 1939 and $44,246,477 as of December 31, 1940. The Commission further erred in deducting any amount for depletion or depreciation from the original cost or actual legitimate cost of Hope's properties for rate base purposes.

**Point 14.**

The Commission erroneously found what it termed the "actual legitimate cost" of Hope's unoperated acreage to be as follows:

| | |
|---|---|
| As of December 31, 1938 | $584,382 |
| As of December 31, 1939 | 567,152 |
| As of December 31, 1940 | 566,105 |
| For the Future | 566,105 |

*(Finding (15) of "Order Reducing Rates;" last full sentence under the heading "Other Used and Useful Property" and table and last paragraph under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).*

The Commission should have found, and erred in not finding, that the original cost and the actual legitimate cost of such unoperated acreage was $681,882 as of December 31, 1938, $664,652 as of December 31, 1939 and $663,605 as of December 31, 1940. Said findings and said failure to make such findings, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence and reflect the errors specified in Points 4 and 10 above.

**Point 15.**

The Commission erroneously found that the working capital necessary for the continued and efficient operation of Hope's interstate natural gas business is as follows:

| | |
|---|---|
| As of December 31, 1938 | $2,100,000 |
| As of December 31, 1939 | 2,100,000 |
| As of December 31, 1940 | 2,125,000 |
| For the Future | 2,125,000 |

*(Finding (16) of "Order Reducing Rates;" third and fourth paragraphs under heading "Materials and Supplies Plus Cash Working Capital" and table and last paragraph under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).*

The Commission should have found, and erred in not finding, that said amount should be $2,997,230 in each year. Said findings, and said failure to make such finding, and each of them, are arbitrary, unreasonable, unlawful and without support in the evidence.

**Point 16.**

The Commission erroneously found that Hope's additional capital expenditures (less increases in depletion and depreciation reserves) in the three-year period 1941-1943 would result in an average increase in net actual legitimate cost for that period of only $1,392,021. *(Finding (17) of "Order Reducing Rates;" text and footnote under heading "Estimated Additional Fixed Capital Expenditures" and table and last paragraph under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).* The Commission should have found and erred in not finding that the actual increase in net actual legitimate cost by July 1, 1942, when Hope was ordered to file new rates, upon the basis of its own estimates of annual depletion and depreciation, was $2,027,021, and that for the future period after July 15, 1942, for which the Commission ordered new rates, the average increase in net actual legitimate costs would be at least an additional $2,027,021. Said findings and said failure to make such findings, and each of them, are arbitrary, unreasonable and unlawful.

**Point 17.**

The Commission erroneously found, and used as the basis of its said order, rate bases as follows:

| | |
|---|---|
| As of December 31, 1938 | $32,703,881 |
| As of December 31, 1939 | 31,948,914 |
| As of December 31, 1940 | 32,320,505 |
| For the Future | 32,712,526 |

*(Finding (18) of "Order Reducing Rates;" table and last paragraph under heading "Conclusions With Respect to the Rate Base" of Opinion No. 76).*

Upon the basis of the evidence before it, upon the evidence which it erroneously excluded as set forth in Point 8 above and the relevant evidence of the determinations by the State of West Virginia of the true value in money of Hope's physical property which the Commission erroneously rejected (Exhibits 108 and 109, Record, pp. 5399-5429), or upon its own investigation as to the present value of Hope's interstate properties, which the Commission erroneously failed and refused to make, the Commission should have found, and erred in not finding, that the present value of said properties was not less than $66,360,837 as of December 31, 1938, $65,404,707 as of December 31, 1939, $65,392,233 as of December 31, 1940 and $68,265,225 for the future, and that for the purpose of determining just and reasonable rates the rate base should be represented by said present values. Said findings, said rejections of relevant evidence, said failure to make investigation, and said failures to make such findings, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence, and reflect the errors specified in Points 1 to 6 and 8 to 16, inclusive, above.

**Point 18.**

The Commission erroneously found that the fair rate of return for Hope is not more than 6½ per cent upon the rate bases found by it and that $2,191,314 is the maximum fair annual return which Hope is entitled to earn in the future. *(Findings (18) and (19) of "Order Reducing Rates;" second and third paragraphs and footnote 5 under the heading "Corporate And Financial History;" first sentence under heading "Rate Base;" last paragraph under heading "Impropriety Of Including In Rate Base Items Previously Charged To Expense;" and all paragraphs except the first 5 sentences under heading "Rate of Return" of Opinion No. 76).* The Commission should

have found; and erred in not finding, that the fair rate of return on the present fair value of Hope's interstate property is not less than 8 per cent; that the fair rate of return upon a prudent investment or original cost or actual legitimate cost rate base for Hope's interstate property is not less than a weighted average of 11.8 per cent; and that the minimum fair annual return to which Hope is entitled from its interstate business and upon its interstate properties is at least $5,000,000. Said findings and said failures to make such findings, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence, and reflect the errors specified in Points 1 to 6 and 8 to 17, inclusive, above.

**Point 19.**

The Commission erroneously found that Hope's operations for 1940, as adjusted by the Commission, are a proper basis for fixing future rates. *(Finding (20) of "Order Reducing Rates;" first paragraph under heading "Operating Revenues and Expenses;" first paragraph under heading "Future Operating Expenses;" and first paragraph (except 1st sentence) under heading "Reasonable Earnings and Rates for the Future" of Opinion No. 76).* The Commission should have found, and erred in not finding, that the year 1940 was a year of abnormal operations by Hope; that Hope's sales of gas in that year greatly exceeded those of any other year in the previous twenty; that Hope's operating expenses for that year were abnormally low (by at least $2,000,000) with relation to the volume of sales because of the necessity and temporary feasibility of meeting the sudden industrial demands of that year by excessive withdrawals from Hope's own gas reserves and at costs far below normal or average costs; and that Hope's average operating experience for the years 1937 to 1939, inclusive, or at most for the years 1937 to 1940, inclusive, adjusted for known increases in operating expenses, is the proper

basis for testing the reasonableness of present rates or fixing future rates. Said findings and said failures to make such findings, and each of them, are arbitrary, unreasonable, unlawful and without support in the evidence.

**Point 20.**

The Commission erroneously found that the proper credit to Hope's operating expenses by reason of the gasoline and butane extracted from its gas by its affiliate, Hope Construction & Refining Company, and the steam and boiler fuel furnished such company (except steam furnished at Goff Station), was $352,516 for 1939, $304,697 for 1940 and $304,697 annually since 1940. *(Finding (22) of "Order Reducing Rates;" all paragraphs and tables under heading "Affiliate's Excess Profits From Processing Hope Company's Gas" of Opinion No. 76).* The Commission should have found, and erred in not finding, that the proper credit resulting from such operations should be an average of $178,656 per year for the period 1937-1939, inclusive, and $174,288 per year for the period 1937-1940, inclusive. Said findings, and said failure to make such findings, and each of them, are arbitrary, unreasonable, unlawful, unconstitutional, without support in the evidence and reflect as to the property and operations of Hope Construction & Refining Company the same errors as specified with respect to the property and operations of Hope in Points 1 to 6 and 8 to 19, inclusive, above and 21 below.

**Point 21.**

The Commission erroneously found that the reasonable and proper allowances for Hope's operating expenses were as follows:

| | 1939 | 1940 | Since 1940 |
|---|---|---|---|
| Operating Expenses | $14,242,454 | $15,775,195 | $16,272,934 |
| Miscellaneous Gas Revenues | ( 68,695) | ( 83,275) | ( 83,275) |
| Allocation of Costs to Local West Virginia Sales | ( 2,328,110) | ( 2,694,075) | ( 2,694,075) |
| Total Deductions from Interstate Revenues | $11,845,649 | $12,997,845 | $13,495,584 |

*(Finding (23) of "Order Reducing Rates.")*

The Commission should have found, and erred in not finding, that the reasonable and proper allowances for Hope's operating expenses (including amortization of reclassification and rate case expenses) and after allocation of costs to local West Virginia sales, miscellaneous gas revenues, and taxes (namely, the "Total Deductions from Interstate Revenues") were $13,157,098 for 1937, $12,980,238 for 1938, $12,646,399 for 1939, $14,658,087 for 1940, at least $15,475,034 annually since 1940 and at least $17,475,034 annually after July 15, 1942.

Said findings and the further findings and conclusions next italicized as follows: *all paragraphs under the heading "Depletion and Depreciation Expenses"; 4th, 5th, 6th and 8th sentences under heading "Reclassification and Rate Case Expenses"; second paragraph (3d, 4th, 7th and 8th sentences only) under the heading "Exploration and Development Costs"; all paragraphs under the heading "Affiliate's Excess Profits From Processing Hope Company's Gas"; third (except 1st sentence), sixth and seventh paragraphs under the heading "Other Adjustments to Operating Expenses"; amounts set forth for following items in the first table under heading "Operating Expenses Summary": "Excess Profits on Gasoline and Butane," "Steam Furnished H. C. & R. Co.," "Excess Cost of Coke-oven Gas," "Donations," "Expenses Applicable to Prior Years," "Adm. & General Expenses Capitalized in Error."*

*"Depletion and Depreciation," "Reclassification and Rate Case Expenses," "Total Decreases," "Total Increases," "Total Adjustments"; amounts set forth for following items in the second table under the heading "Operating Expenses Summary" and in the last table before the heading "Rate of Return": "Natural Gas Production," "Transmission Expenses," "Administrative and General Expenses," "Depletion," "Depreciation" (interstate and specific distribution), "Exploration and Development Costs," "Taxes: State and Miscl. Federal," "Federal Income Tax" (as adjusted for future), "Total Interstate," "Total Distribution," "Total Operating Expenses"; second (except 1st sentence), fourth (except table) and fifth paragraphs and footnote 32 under the sub-heading "Federal Income Tax" of the heading "Operating Expenses Summary"; amounts set forth for following items in the first table after the sub-heading "Federal Income Tax" of the heading "Operating Expenses Summary" and in the first table under the heading "Reasonable Earnings and Rates for the Future": "Interstate Operating Expenses" and "Operating Expenses," "Allocation of Costs to Local West Virginia Sales" including "Specific Distribution Expenses" and "Return at 6½% on Distribution Property" in Footnote 31, "Federal Income Tax at 40%" (after income tax saving), "Total Deductions from Interstate Revenues," "Net Operating Revenue (Income) from Interstate Sales," "Return at 6½% on Interstate Rate Base," "Excess Earnings before Income Tax Saving," "Income Tax Saving," "Excess Earnings after Income Tax Saving," "Excess of Future Net Operating Income over 6½% Return"; second and fifth (3rd sentence only) paragraphs under the heading "Reasonable Earnings and Rates for the Future" of Opinion No. 76,* and each of said findings and conclusions, and the failures of the Commission to make the findings it should have made as aforesaid, are

arbitrary, unreasonable, unlawful, unconstitutional and without support in the evidence, particularly because:

(a) The Commission erroneously based depreciation and depletion charges upon the book cost of Hope's properties, adjusted only for so-called accounting errors, in lieu of basing the same upon the present or replacement value of said properties as is required by the Natural Gas Act and in order to avoid depriving Hope of said properties without due process of law and taking them for public use without just compensation in violation of Amendment V to the Constitution of the United States. In so doing the Commission allowed no depreciation or depletion charge in respect of thousands of items of property owned by Hope which are actually existing and being consumed in the interstate service of Hope and for which no amounts whatsoever appear in said adjusted book cost;

(b) The Commission erroneously failed to allow any amount whatsoever for the annual depreciation and depletion of the net additional properties added by Hope since December 31, 1940 to date and now used in its interstate service, which the Commission found to total $1,392,021 and which it should have found as $2,027,021 as set forth in Point 16 above; and further erroneously failed to allow any amount whatsoever for the annual depreciation and depletion of the net additional properties which will be added by Hope as set forth in Point 16 above during the future period after July 15, 1942, for which the Commission ordered new rates;

(c) The Commission used erroneous annual depreciation rates which reflect erroneous estimated service lives and which disregard Hope's actual experience on depreciation and salvage and which have no foundation in fact, and applied hypothetical annual depletion calculations to the construction costs of a large portion of Hope's field lines which are subject only to depreciation and not to depletion;

(d) The Commission erroneously made no provision in operating expenses for the substantial actual expense incurred by Hope in abandoning its wells and other property actually abandoned since January 1, 1939 or for such actual expense as it will be incurred by Hope in substantial amounts in the future period for which the Commission ordered new rates, and erroneously requires Hope to pay such expenses from the cash or property previously acquired by Hope or from the return which the Commission purported to allow it for such period and the future;

(e) The Commission erroneously failed to include in Hope's 1940 operating expenses $165,963 actually expended by Hope in that year for a deep test well which proved nonproductive;

(f) The Commission erroneously allowed for the return to Hope on its West Virginia distribution properties only 6½ per cent upon the book cost of said properties less Hope's book depreciation reserve therefor, thus committing in respect of said distribution properties the errors committed in respect of Hope's interstate properties as set forth in Points 1 to 6 and 8 to 19, inclusive, above, and erroneously assuming, contrary to fact and without evidence, that Hope's book depreciation reserve for said properties measured the depreciation therein, and erroneously allowed as the annual depreciation allowance for such property only Hope's book depreciation charge, in lieu of allowing for such return and depreciation a total amount of not less than $250,000 per year;

(g) The Commission erroneously eliminated $16,455 from Hope's actual 1939 operating expenses and $16,882 from its actual 1940 operating expenses primarily for estimated property taxes allocated by the Commission to Hope's coke oven gas lines, although the evidence showed that Hope's total property taxes would have been the same irrespective of its ownership and operation of these lines;

(h) The Commission erroneously failed to make any allowance for interest upon Hope's reclassification and rate case expenses whose reimbursement to Hope the Commission deferred over a period of ten years, nor did it allow any provision in Hope's working capital in lieu of such interest provision;

(i) The Commission in calculating its claimed "Income Tax Saving" under the interstate rates prescribed by it erroneously overlooked, disregarded and neglected to take into account the fact that under the United States Internal Revenue Code the income tax depletion deductions which would be allowed Hope under the reduced rates prescribed by the Commission would decrease by at least one-third, thus, on the Commission's own theories, increasing the federal income tax payable by Hope in the future from the $76,579 allowed by the Commission to at least $379,696 and decreasing the so-called "Income Tax Saving" and the total amount of rate reduction calculated by the Commission by $303,117;

(j) The Commission further erroneously overlooked, neglected and failed to take into account the fact that the future federal income tax rate upon the earnings of Hope Construction & Refining Company will be at least 40 per cent instead of the actual tax rates in past years which the Commission reflected in its future credit for so-called excess profits from the gasoline and butane extracted by said company; and

(k) The Commission in using Hope's 1940 operating expenses, as adjusted by it, in fixing rates for the future made the errors specified in Point 19 above and further and erroneously failed to adjust Hope's operating expenses upward by at least $2,000,000 to reflect the fact that Hope's own production system can not supply during the period for which the Commission ordered new rates the volumes of gas produced therefrom in 1940, and otherwise failed to allow Hope sufficient amounts in its future oper-

ating expenses to explore for and produce, or to purchase, the abnormal quantities of gas which if has been called upon to deliver in 1940 and since and whose continued sale the Commission assumes in fixing the future rates ordered by it.

## PART B

## As To The Commission's "Findings As To Lawfulness Of Past Rates":

### Point 22.

The Commission exceeded the power and authority delegated to it by the Natural Gas Act by making its said "Findings As To Lawfulness Of Past Rates" and erroneously determined that it had such jurisdiction and authority and that such findings are in the public interest (*Finding (2) of said "Findings"; fifth, ninth and succeeding sentences under heading "Lawfulness of Past Rates" of Opinion No. 76*).

### Point 23.

The Commission erroneously construed the Natural Gas Act to mean that it had power and authority to determine that rates and charges contained in Hope's schedules filed with it in 1938, and which for that year on the basis of the Commission's theories and findings as adopted and applied in its said findings and orders failed by more than $1,170,000 to produce a 6½ per cent return on the rate base found by the Commission, became unjust, unreasonable and unlawful in any subsequent year in which they produced any amount in excess of said return on said rate base; and that it had power and authority to fix as the only, just, reasonable and lawful rate and charge for any past year the amount which would have produced precisely such return in such year had such rate or charge actually been in effect in such year. The Commission in said "Findings" rigorously applied this erroneous construction.

**Point 24.**

The Commission in said "Findings" erred in not finding that the rates charged and received by Hope for the transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption were, and in the future would be, just and reasonable and erred in finding (a) that said rates were unjust, unreasonable and excessive, and therefore unlawful, to the extent of $920,029 for the year 1939, $4,210,154 for the year 1940, and $3,609,857 since 1940 (on an annual basis) as set forth in finding (21); (b) that the total required revenue for all interstate service of Hope was for said years as set forth in finding (22); (c) that the just, reasonable and lawful rates for natural gas sold by Hope to The East Ohio Gas Company were those required to produce compensation in the amounts for said years set forth in finding (23); and (d) that the rates charged and received by Hope for the transportation and sale of natural gas to The East Ohio Gas Company were unjust, unreasonable, excessive, and therefore unlawful, to the extent of $830,892 during 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940 as set forth in finding (24). In making said findings:

(a) The Commission proceeded unlawfully, exceeded its statutory and constitutional powers and erroneously construed the terms and provisions of the Natural Gas Act as set forth in Points 1, 2, 3, 4, 5, 6, 22 and 23 above;

(b) The Commission acted arbitrarily, unreasonably and without support in the evidence and erroneously incorporated, reflected and relied upon the erroneous findings and conclusions set forth in Points 25 to 27 below; and

(c) The Commission found rates and charges unjust, unreasonable and excessive, and therefore unlawful, as set forth in said findings (21) and (24), which permitted Hope to earn no more than the just compensation for the use of its property in public service, and the fair return on the

present fair value of its property, to which it is entitled under Amendment V to the Constitution of the United States; and in finding the total required revenue for all interstate service of Hope and that just, reasonable and lawful rates for natural gas sold by Hope to The East Ohio Gas Company were no more than those required to produce compensation in the amounts set forth in said findings (22) and (23), the Commission determined rates, required revenue and compensation which, if anywhere recognized or enforced, will deprive Hope of its property without due process of law and take such property for public use without just compensation in violation of said Amendment V, by reason of which said findings (21) to (24), inclusive, are unconstitutional and void.

## Point 25.

With respect to findings (7), (8), (9), (10), (11), (12), (13), (14), (15), (16) and (19) of said "Findings" the Commission erred as to each to the extent, in the manner and for the reasons hereinbefore specified for the same or similar findings in said "Order Reducing Rates" and reference is hereby made to such of the above Points as are listed below as designating the several specific grounds of error urged as an objection by Hope to each and every such erroneous findings. The above Points so referred to, which are here incorporated as if here fully rewritten, relate to said erroneous findings as follows:

| Finding | Points Above Here Referred to and Incorporated |
|---|---|
| (7) | 8 |
| (8) | 9 |
| (9) | 10 |
| (10) | 10 |
| (11) | 11 |
| (12) | 12 and 13 |
| (13) | 14 |
| (14) | 15 |
| (15) | 16 and 17 |
| (16) | 18 |
| (19) | 20 |

**Point 26.**

The Commission erroneously found that Hope's actual operations for 1939 and 1940, respectively, are the reasonable and proper bases for determining lawful rates in each of those years, and that 1940 operations, as adjusted, are the reasonable and proper basis for determining lawful rates since 1940 as set forth in finding (17) of said "Findings." The Commission should have found, and erred in not finding, that the average of operations for the years 1937 to 1939, inclusive, or at most 1937 to 1940, inclusive, was a proper basis for determining lawful rates for the years 1938 to the present and for each of such years. The Commission further erred in disregarding the actual operations of Hope under its existing rates during the year 1938, upon the basis of which it would have found, applying all of its own theories, findings and conclusions as set forth in its said findings and orders, that the rates charged by Hope for its interstate service in 1938 were just and reasonable and failed to yield the fair annual return to which Hope was entitled by $1,170,534, and that the rates charged by Hope to The East Ohio Gas Company in 1938 failed to yield the compensation to which Hope was entitled by $817,588. The Commission further erred in unlawfully disregarding and in effect overruling its order of December 20, 1940, denying the motion of complainants, the Cities of Cleveland and Akron, for an immediate order reducing the rates of Hope to The East Ohio Gas Company. Said findings, said failure to make such findings, and such disregarding of actual operations and of its own previous order, and each of them, are arbitrary, unreasonable and unlawful and reflect the errors specified in Points 22 and 23 above.

**Point 27.**

The Commission erroneously made the findings as to the reasonable and proper allowances for Hope's operating expenses set forth in finding (20) of said "Findings" and in the paragraphs, tables and pages of said Opinion No. 76 referred to in Point 21 above. Said findings, the Commission's failures to make the findings referred to in Point 21 above, and each of them, are erroneous upon the grounds set forth in Point 21 which is here incorporated as if here fully rewritten, and upon the following additional grounds:

(l) The Commission erroneously and without any basis whatsoever in the evidence determined that $27,244 of Hope's operating expenses for 1939 was applicable to prior years;

(m) The Commission erroneously, and contrary to its own pronouncement in finding (17) of said "Findings," calculated past rates upon the theory that Hope paid only $39,716 federal income tax in 1939 and none whatsoever in 1940, although in fact it paid $191,521 in 1939 and $912,313 in 1940 as shown by the Commission's second tabulation under the heading "Operating Expenses Summary" of Opinion No. 76; and further erroneously assumed that had the Commission's past rates been in effect Hope would have paid only $39,716 federal income tax in 1939 and none whatsoever in 1940, whereas it would have paid substantial amounts even had said past rates been in effect by reason of the reduced income tax depletion deductions to which it would have been entitled under the United States Internal Revenue Code as set forth in Point 21 above.

WHEREFORE, Hope respectfully prays for relief as set forth above.

HOPE NATURAL GAS COMPANY,

By WILLIAM B. COCKLEY,

WALTER J. MILDE,

THEODORE R. COLBORN,
1759 Union Commerce Building,
Cleveland, Ohio,

WILLIAM A. DOUGHERTY,
30 Rockefeller Plaza,
New York, New York,

KEMBLE WHITE,

ANTHONY F. McCUE,
Clarksburg, West Virginia,
*Its Attorneys.*

STATE OF OHIO,
COUNTY OF CUYAHOGA, ss.

WALTER J. MILDE, being first duly sworn, says that he is attorney for Hope Natural Gas Company, a corporation, petitioner herein; that he is duly authorized in the premises; that he has read the foregoing Petition for Review; and that the matters and things therein stated are true as he verily believes.

WALTER J. MILDE.

SWORN TO before me and subscribed in my presence this July 16, 1942.

CATHERINE MARTIN,
*Notary Public.*

(Notarial Seal)

Same day, to-wit, July 18, 1942, notification to respondents of the filing of petition for review, together with a copy of the petition for review, transmitted by mail to Federal Power Commission, Washington, D. C.; City of Cleveland, Ohio; City of Akron, Ohio, and Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania, respondents.

July 22, 1942, the appearance of William B. Cockley and William A. Dougherty is entered for the petitioner.

Same day, the appearance of A. F. O'Neil, Director of Law, and Clyde B. Macdonald, Assistant Director of Law, is entered for the respondent City of Akron, Ohio.

July 23, 1942, the appearance of Richard J. Connor, General Counsel, and Milford Springer, Counsel, is entered for the respondent Federal Power Commission.

Same day, the appearance of Kemble White is entered for the petitioner.

July 24, 1942, the appearance of Thomas A. Burke, Jr., Director of Law; Spencer W. Reeder, Assistant Director of Law in Charge of Utility Controversies; Robert E. May and Alex. W. Parker is entered for the respondent City of Cleveland, Ohio.

July 29, 1942, the appearance of Samuel Graff Miller; Harry M. Showalter; and Claude T. Reno, Attorney General, Commonwealth of Pennsylvania, is entered for the respondent Pennsylvania Public Utility Commission.

July 31, 1942, the appearance of Anthony F. McCue is entered for the petitioner.

August 28, 1942, the transcript of record is filed.

September 10, 1942, application of petitioner for special permission to file a brief exceeding 50 printed pages is filed.

September 12, 1942, order granting special permission to petitioner to file a brief in excess of 50 printed pages but not exceeding 215 printed pages is filed.

Same day, to-wit, September 12, 1942, motion of respondent, City of Cleveland, to dismiss Part B of Petition for Review is filed.

NOTE.—The motion to dismiss is in the words and figures following, to-wit:

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT.

## No. 4979.

**October Term, 1942.**

HOPE NATURAL GAS COMPANY,
*Petitioner,*

v.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON,
PENNSYLVANIA PUBLIC UTILITY COMMISSION,
*Respondents.*

## MOTION OF RESPONDENT, CITY OF CLEVELAND, TO DISMISS PART B OF PETITION FOR REVIEW AND BRIEF IN SUPPORT THEREOF.


THOMAS A. BURKE, JR.,
*Director of Law,*
204 City Hall,
Cleveland, Ohio,

SPENCER W. REEDER,
*Assistant Director of Law in Charge of Utility Controversies,*
204 City Hall,
Cleveland, Ohio,

ROBERT E. MAY,
520 Shoreham Building,
Washington, D. C.,
*Attorneys for Respondent, City of Cleveland.*


September 17, 1942.

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# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT.

## No. 4979.

**October Term, 1942.**

HOPE NATURAL GAS COMPANY,

*Petitioner,*

v.

FEDERAL POWER COMMISSION,

CITY OF CLEVELAND,

CITY OF AKRON,

PENNSYLVANIA PUBLIC UTILITY COMMISSION,

*Respondents.*

## MOTION OF RESPONDENT, CITY OF CLEVELAND, TO DISMISS PART B OF PETITION FOR REVIEW.

The City of Cleveland, a respondent in the above entitled cause, moves this Honorable Court to dismiss Part B of the Petition for Review filed herein on the ground that the Court has no jurisdiction under Section 19(b) of the Natural Gas Act (52 Stat. 831; 15 U. S. C. A. 717r (b)) to review the "Findings as to Lawfulness of Past Rates" entered by respondent, Federal Power Commission, on May 26, 1942. These "findings" do not constitute an "order" within the meaning of Section 19(b) of the Natural Gas Act.

THOMAS A. BURKE, JR.,
*Director of Law,*

SPENCER W. REEDER,
*Assistant Director of Law in Charge of Utility Controversies,*

ROBERT E. MAY,
*Attorneys for Respondent, City of Cleveland.*

**Notice of Motion.**

Please take notice that this Motion of Respondent, City of Cleveland, to Dismiss Part B of Petition for Review will be brought on for hearing before this Honorable Court on the 5th day of October, 1942, or as soon thereafter as the Court may hear the same in the Postoffice Building in the City of Richmond, Virginia.

THOMAS A. BURKE, JR.,

SPENCER W. REEDER,

ROBERT E. MAY,

*Attorneys for Respondent, City of Cleveland.*

**Proof of Service.**

STATE OF OHIO,
CUYAHOGA COUNTY, ss.

Spencer W. Reeder, attorney for respondent, City of Cleveland, being first duly sworn, deposes and says that on the 11th day of September, 1942, he duly served a copy of the within motion and brief in support thereof upon counsel for petitioner, Hope Natural Gas Company, by depositing the same on such date in the United States Post Office at Cleveland, Ohio, in a sealed envelope, with postage prepaid, addressed to William B. Cockley, Attorney for Hope Natural Gas Company, at his post office address, 4759 Union Commerce Building, Cleveland, Ohio; that on the 11th day of September, 1942, he duly served a copy of the within motion and brief in support hereof upon counsel for respondent, Federal Power Commission, by depositing the same on such date in the

United States Post Office at Cleveland, Ohio, in a sealed envelope, with postage prepaid, addressed to Richard J. Connor, General Counsel, Federal Power Commission, Washington, D. C.; that on the 11th day of September, 1942, he duly served a copy of the within motion and brief in support thereof upon counsel for respondent, City of Akron, by depositing the same on such date in the United States Post Office at Cleveland, Ohio, in a sealed envelope, with postage prepaid, addressed to A. F. O'Neill, Director of Law, 304 Municipal Building, Akron, Ohio; that on the 11th day of September, 1942, he duly served a copy of the within motion and brief in support thereof upon counsel for respondent, Pennsylvania Public Utility Commission, by depositing the same on such date in the United States Post Office at Cleveland, Ohio, in a sealed envelope, with postage prepaid, addressed to Claude T. Reno, Attorney General, Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania.

SPENCER W. REEDER.

Sworn to before me and subscribed in my presence this 11th day of September, 1942.

IRENE G. CASHMAN,

(Notarial Seal) *Notary Public.*

My Commission expires Mar. 27, 1944.

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT.

## No. 4979.

**October Term, 1942.**

HOPE NATURAL GAS COMPANY,
*Petitioner,*

v.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON,
PENNSYLVANIA PUBLIC UTILITY COMMISSION,
*Respondents.*

## BRIEF IN SUPPORT OF MOTION OF RESPONDENT, CITY OF CLEVELAND, TO DISMISS PART B OF PETITION FOR REVIEW.

### STATEMENT.

On May 26, 1942, the respondent, Federal Power Commission, acting upon complaint of respondent, City of Cleveland, and after investigation and hearing, made what the Commission called "Findings as to Lawfulness of Past Rates."

For the convenience of the Court, a copy of said Federal Power Commission "Findings as to Lawfulness of Past Rates," together with the opinion incorporated by reference in said findings, has been printed as an appendix hereto.

Petitioner erroneously dubs the Federal Power Commission's "Findings as of Lawfulness of Past Rates" an "order" (Petition for Review, pp. 1, 2, 8), incorrectly as-

serts that the Commission attempted to "fix" past rates (Petition for Review, p. 35, Point 23); and devotes six points and five pages of its Petition for Review under the caption "Part B—As to The Commission's 'Findings As To Lawfulness of Past Rates'" to a purported appeal from these findings. (Petition for Review, pp. 35-39, incl.; Points 22-27, incl.)

Relying upon the established law in this circuit that mere "findings" of the Federal Power Commission are not reviewable *Carolina Aluminum Company v. Federal Power Commission*, 97 F. (2d) 433 (1938) (C. C. A. 4), and believing that a natural gas company cannot make such findings reviewable by the colorable device of calling them an order when they are not an order, respondent, City of Cleveland, has filed this Motion to Dismiss Part B of the Petition for Review.

We have filed this motion for the purpose of expediting and shortening the briefing, argument and determination of the issues raised by Part A of the Petition for Review, relating to the Commission's order fixing rates for the future, said Part A being a subject matter over which the Court has unquestioned jurisdiction. The granting of this motion in advance of the merits will eliminate nearly one fourth of the points raised in the Petition for Review.

Although the City of Cleveland would be delighted to have this or any other tribunal rule upon the merits of these findings,—which we believe are fully supported by the evidence, wholly within the jurisdiction of the Commission, and not otherwise unlawful—nevertheless we recognize that jurisdiction of a Court cannot be created by consent of the parties and that absence of jurisdiction cannot be excused by waiver of the parties. *United States v. Griffin*, 303 U. S. 226, 229; *Houston Natural Gas Corp. v. Securities and Exchange Commission*, 100 F. (2d) 5 (C. C. A. 4th, 1938).

We believe that an early ruling on this motion will expedite the case of *East Ohio Gas Company v. Cleveland*, P. U. C. O. 11,001, 11,218 and 11,442, which has already been pending for more than three years before The Public Utilities Commission of Ohio. The Federal Power Commission's "Findings as to Lawfulness of Past Rates" were avowedly made at the request of and for use by the City of Cleveland as evidence in said proceeding before The Public Utilities Commission of Ohio against Hope's affiliate, The East Ohio Gas Company, and in support of Cleveland's claim for a $5,000,000 refund to its people, as ultimate consumers.

Since this case involves questions of great public interest, which ought not to be confused by consideration of a separate cause of action over which this Court has no jurisdiction, we respectfully request that this motion be set down for early oral argument and that it be disposed of in advance of the merits.

*History of the Federal Power Commission's "Findings as to Lawfulness of Past Rates."*

On May 26, 1942, as aforesaid, the respondent, Federal Power Commission, made its "Findings as to Lawfulness of Past Rates." (R. 14202.)

As the "findings" recite, they were made at the request of respondent, City of Cleveland, as an aid to state regulation. (Appendix, finding (1).)

The ultimate "finding" is that (Appendix, finding (24)):

> "(24) The rates charged and received by the Hope Natural Gas Company for the transportation and sale of natural gas in interstate commerce to The East Ohio Gas Company for resale for ultimate public consumption were unjust, unreasonable, excessive, and therefore unlawful to the extent of $830,893 during 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940."

The history of these "findings" is set forth in the opinion of the respondent, Federal Power Commission, as follows:

"LAWFULNESS OF PAST RATES:

"In 1938 the Cities of Cleveland and Akron, Ohio, filed complaints with the Federal Power Commission alleging that the rate which Hope charged East Ohio Gas Company was unjust, unreasonable and unlawful. These complaints were registered before Hope filed its five interstate wholesale rate schedules which are involved in these proceedings. The acceptance of a rate schedule for filing does not mean that the Commission approves it, and does not establish the justness or reasonableness of the rate. *Re Home Gas Co.*, 39 P. U. R. (N. S.) 102, 109. On October 14, 1938, the Commission instituted an investigation of the reasonableness of all of Hope's interstate rates. If it had been possible to adduce the volume of evidence required for the disposition of such a complex matter within a few months, the Commission would have prescribed the reasonable interstate wholesale rates for 1939 and subsequent years. The City of Cleveland raised the issue of the lawfulness of the rate charged Hope to the East Ohio Gas Company and asked this Commission, as an aid to State regulation, to make a separate determination of the reasonable rates since June 30, 1939. Originally the City of Cleveland requested this Commission to find the lawful Hope-East Ohio rates since June 21, 1938, but it now represents that the subject is idle for rates prior to June 30, 1939, because those rates which Cleveland consumers were obligated to pay East Ohio have been settled. The Commission does not have the authority to fix rates for the past and to award reparations. But Congress did empower and instruct the Commission in Section 5(a) of the Natural Gas Act to fix future rates, and as a step in that process we must necessarily consider the reasonableness of past and existing rates. When the issue is raised and the public interest will be served, we consider as a necessary part of that duty the power to examine the entire rate problem involved and to determine what rates were lawful in the past. Also, Section 14(a) of the Act authorizes

the Commission to investigate any facts which it finds necessary in order to determine whether Hope has violated any provision of the Natural Gas Act. Furthermore, the Commission has power to perform any act pursuant to Section 16, which is necessary or appropriate to carry out the provisions of the Act. Under Section 4(a) of the Act any interstate wholesale rate that is not just and reasonable is unlawful. *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ..... Hope's rate collected from East Ohio Gas Company was lawful after June 21, 1938, the effective date of the Act, only to the extent that it was just and reasonable. The City of Cleveland states that the Ohio Commission is investigating the reasonableness of the East Ohio Gas Company's bonded retail rates in Cleveland for the period since June 30, 1939, and that the lawfulness of Hope's rate is an important factor in the case. Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness of the interstate wholesale rates charged by Hope and other natural gas companies. (Sections 1, 2, 4 and 5(a). See *Missouri v. Kansas Natural Gas Co.*, 265 U. S. 298, 308; *Illinois Natural Gas Co. v. Central Illinois Public Service Co.*, 314 U. S. 498, 506; *Kentucky Nat. Gas Corp. v. P. S. C.*, 28 F. Supp. 509, 513, aff 119 Fed. (2d) 417.)

"In response to the request of the City of Cleveland, the Commission will make the appropriate findings of fact as to the lawfulness of the rates charged East Ohio by Hope since June 30, 1939. The Interstate Commerce Commission has furnished precedents for the performance of this public duty. (*W. A. Barrows Porcelain Enamel Co. v. Cushman Motor Delivery Co.*, 11 M. C. C. 365, 366; *Dixie Mercerizing Co. v. ET & WNC Motor Transp. Co.*, 21 M. C. C. 491, 492. See *United States v. Morgan*, 307 U. S. 183, 313 U. S. 409; *Lima Tel. Co. v. P. U. C.*, 98 O. S. 110, 120 N. E. 330.) Congress intended that this Commission cooperate with State Commissions and municipalities, and the provisions of Sections 5(b) and 17 are special evidence of such intent."

At the oral argument before respondent, Federal Power Commission, counsel for petitioner conceded that such findings as to lawfulness of past rates are nonappealable, as follows (Milde, R. 14179):

> "We cannot appeal from any recital you make that the rates *were* unreasonable and unlawful in 1916 or 1928 or 1938, or any other time."

This concession was not one improvidently made in the heat of argument. Prior to the oral argument counsel for petitioner filed a printed memorandum with the Federal Power Commission, wherein they said ("Memorandum on Behalf of Hope Natural Gas Company as to the Commission's Jurisdiction in these Proceedings to Adjudge that the Company has in the past Violated the Natural Gas Act," p. 6n):

> "Section 19(b) of the Act does not authorize review of determinations by the Commission even as important as a determination that a company is a natural gas company under the Act. This Commission has so argued before all courts in which this matter has come up and it has been sustained in this construction. *Canadian River Gas Co. v. Federal Power Commission*, 110 F. (2d) 350, 113 F. (2d) 1010 (C. C. A. 10th, 1940); *New York State Natural Gas Corporation v. Federal Power Commission* (C. C. A. 2d, October 26, 1939, not reported); Cf. *East Ohio Gas Company v. Federal Power Commission*, 115 F. (2d) 385 (C. C. A. 6th, 1940)."

Nevertheless, on July 18, 1942, counsel for petitioner filed with this Court a pretended appeal from the Federal Power Commission's "Findings as to Lawfulness of Past Rates." (Petition for Review, Part B, pp. 35-39.)

*Applicable Statute.*

The only applicable statute is the Natural Gas Act Section 19(b), which provides (52 Stat. 831; 15 U. S. C. A. 717r (b)):

"(b) Any party to a proceeding under this chapter aggrieved by an *order* issued by the Commission in such proceeding may obtain a review of such *order* in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the *order* relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the *order* of the Commission upon the application for rehearing, a written petition praying that the *order* of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the *order* complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such *order* in whole or in part. No objection to the *order* of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original *order*. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such *order* of the

Commission shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 346 and 347 of Title 28, as amended." (Italics ours.)

*Preliminary Analysis.*

Under the Natural Gas Act Section 19(b), this Court has jurisdiction to review only "orders" of the Federal Power Commission. It has no jurisdiction to review mere findings.

The "Findings as to Lawfulness of Past Rates" from which petitioner attempts to appeal in Part B of the Petition for Review are not an order. They are findings.

These "findings" are not the basis of the Commission's order fixing rates for the future. That order is based on other findings which are attacked in Part A of the Petition for Review. Under the Natural Gas Act, the only finding that is necessary to a rate reduction order is the finding that the existing rate "*is* unjust, unreasonable, unduly discriminatory, or preferential." Natural Gas Act Section 5(a); 15 U. S. C. A. Section 717d; 52 Stat. 823. In this case, the Federal Power Commission's rate reduction order, fixing future rates, is based solely upon the findings incorporated therewith. Therefore, a consideration of the Federal Power Commission's "Findings as to Lawfulness of Past Rates" is not necessary in testing the reasonableness of the rate reduction order attacked in Part A of the Petition for Review. The Federal Power Commission's order fixing rates for the future which is attacked in Part A of the Petition for Review is not based upon the Federal Power Commission's "Findings as to Lawfulness of Past Rates."

The Federal Power Commission's "Findings as to Lawfulness of Past Rates" neither direct nor restrain any action on the part of petitioner. They neither command nor direct anything to be done. They carry no direction of

obedience to any previously formulated order of the Commission.

These "findings" are determinations of fact. They are not in substance an order. They are not even in form an order. They have no characteristic of an order, either affirmative or negative. They are only a decision on a controverted matter. These findings are a report—an opinion as distinguished from a mandate.

These findings may be evidence in another proceeding of a breach of statutory duty on the part of petitioner. But the Act imposed the duty. The "findings" do not.

The mere fact that these "findings" may be used as evidence against petitioner or its affiliate in another proceeding does not make them reviewable in this one.

Assuming arguendo that they are binding in another proceeding as between parties to the case below and their privies, unless unsupported by substantial evidence, outside the jurisdiction of the Commission, or otherwise unlawful, the "findings" are subject to challenge in such other proceeding on all these grounds, and petitioner or its privies will have their day in court when and if the findings are offered in evidence against them.

In the Natural Gas Act, Congress has distinguished carefully between orders, which it makes reviewable, and mere determinations, findings, and reports, which it does not make reviewable.

In the body of the statute, for example, Congress specifically mentions "orders" fixing future rates (Natural Gas Act, Section 5(a)); "orders" determining accounts in which particular outlays shall be entered, charged, or credited (Natural Gas Act, Section 8(a)); "orders" authorizing exporting or importing natural gas to or from a foreign country (Natural Gas Act, Section 3); "orders" requiring refund of proposed increased rates collected under bond (Natural Gas Act, Section 4(e)); "orders" directing a natural gas company to extend or improve its transporta-

tion facilities (Natural Gas Act, Section 7(a)); "orders" directing a natural gas company to establish physical connection of its transportation facilities with the facilities of, and to sell natural gas to, any person or municipality engaged or legally authorized to engage in the local distribution of natural gas or artificial gas to the public (Natural Gas Act, Section 7 (a)). Congress has authorized this Court to review such orders (Natural Gas Act, Section 19(b)).

On the other hand, in the body of the Natural Gas Act, Congress has referred to many determinations, reports, and findings, which it purposefully does not call "orders." For example, there is the determination of cost of production or transportation of natural gas by a natural gas company in cases where the Federal Power Commission has no authority to establish a rate governing the transportation or sale of such natural gas (Natural Gas Act, Section 5(b)). There are reports to Congress on information assembled relative to proposed interstate compacts dealing with the conservation, production, transportation, or distribution of natural gas (Natural Gas Act, Section 11(a)) and reports to Congress relative to operation of a compact between two or more states approved by Congress (Natural Gas Act, Section 11(b)). And there is the determination whether any person has violated or is about to violate any provision of the Act or any rule, regulation or order thereunder (Natural Gas Act, Section 14(a)). These findings, determinations, and reports Congress did not authorize the Circuit Courts of Appeals to review (Natural Gas Act, Section 19(b)).

Part B of the Petition for Review should be dismissed because it seeks review of mere "findings." Under Section 19(b) of the Natural Gas Act, it is only an order of the Federal Power Commission and not a finding that this Court is authorized to review.

## ARGUMENT.

### PETITIONER'S PRETENDED APPEAL FROM THE FEDERAL POWER COMMISSION'S "FINDINGS AS TO LAWFULNESS OF PAST RATES," SET FORTH IN PART B OF THE PETITION FOR REVIEW, SHOULD BE DISMISSED BECAUSE UNDER THE NATURAL GAS ACT SECTION 19(b) IT IS ONLY AN "ORDER" AND NOT A FINDING OF THE COMMISSION WHICH THIS COURT IS AUTHORIZED TO REVIEW.

### A. The Commission's "Findings as to Lawfulness of Past Rates" are what the Commission called them—mere findings.

In *Carolina Aluminum Company v. Federal Power Commission*, 97 F. (2d) 435 (1938), (Parker, Circuit Judge), this Court declined to review a mere "finding" of the Federal Power Commission. Holding that Section 313(b) of the Federal Power Act, which is substantially identical with Section 19(b) of the Natural Gas Act, does not authorize review of a mere finding of the Federal Power Commission that the interests of interstate or foreign commerce would be affected by the proposed construction of a hydroelectric power project, this Court said at page 436:

"(1-3) The only statute under which we are given power to review actions of the commission is Sec. 313(b) of the Federal Power Act, 49 Stat. 860, 16 U. S. C. A. § 825*l*(b), the pertinent portion of which is as follows:

"'Any party to a proceeding under this Act (chapter) aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the Circuit Court of Appeals * * * by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the rec-

ord upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive.'

"It will be noted that it is an order and not a finding of the Commission which the court is authorized to review; and there would seem to be little room for doubt that by an order is meant some command of the Commission directing or restraining action or granting or denying some form of relief. An 'order' is a 'mandate, precept; a command or direction authoritatively given; a rule or regulation.' *Black's Law Dictionary*; 46 *C. J.* 1131; 42 *C. J.* 464. An order of the Commission is analogous to the judgment of a court; and it is well settled that findings constitute no part of a judgment even though incorporated in the same instrument with it. 15 *R. C. L.* 570; *Judge v. Powers*, 156 Iowa 251, 136 N. W. 315, Ann. Cas. 1915B, 280. As said by Judge Learned Hand in *Eckerson v. Tanney*, D. C., 235 F. 415, 418, 'The judgment itself does not reside in its recitals, but in the mandatory portions.' In reviewing an order the court may examine the findings to determine whether they support the order and may examine the evidence to determine whether it supports the findings; but the court is given no authority to review a mere finding upon which no order is based, even though it may determine a status which may form the basis of future governmental action, for even such a finding lacks the fundamental characteristics of an order. *Shannahan v. United States*, 58 S. Ct. 732, 82 L. Ed. ....; *United States v. Griffin*, 58 S. Ct. 601, 82 L. Ed. ....; *Piedmont & N. R. Co. v. United States*, 280 U. S. 469, 50 S. Ct. 192, 74 L. Ed. 551; *United States v. Los Angeles & Salt Lake R. Co.*, 273 U. S. 299, 47 S. Ct. 413, 71 L. Ed. 651; *Lehigh Valley R. Co. v. United States*, 243 U. S. 412, 37 S. Ct. 397, 61 L. Ed. 819; *Brady v. Interstate Com-*

*merce Commission*, D. C., 43 F. 2d 847, affirmed *Brady v. United States*, 283 U. S. 804, 51 S. Ct. 559, 75 L. Ed. 1424."

Similarly, in *Shannahan v. United States*, 303 U. S. 596 (1938) (Mr. Justice Brandeis), the Supreme Court of the United States held that a finding of the Interstate Commerce Commission that "the Chicago, South Shore and South Bend Railroad is not a street, interurban or suburban electric railway within the meaning of the exemption proviso in the first paragraph of Section 1 of the Railway Labor Act, as amended June 21, 1934, and it is therefore subject to the provisions of that act," was not reviewable as an "order" within the meaning of the Urgent Deficiencies Act. Mr. Justice Brandeis, speaking for the court, said (303 U. S. 599, 601):

(p. 599) "The Commission intervened. Its answer, and that of the United States, challenged the jurisdiction of the court on the ground that the determination of the Commission was not an 'order' within the meaning of the Urgent Deficiencies Act. The case was heard before three judges on the pleadings and evidence; and a decree was entered dismissing the bill for want of jurisdiction, one judge dissenting. 20 F. Supp. 1002. The Trustees appealed.

"*First.* The function of the Commission is limited to the determination of a fact. Its decision is not even in form an order. It 'had no characteristic of an order, affirmative or negative.' *United States v. Illinois Cent. R. Co.*, 244 U. S. 82, 89; *United States v. Atlanta, B. & C. R. Co.*, 282 U. S. 522, 527-28. *Compare Lehigh Valley R. Co. v. United States*, 243 U. S. 412, 414. But even if this difficulty is overlooked, others are insuperable. The decision neither commands nor directs anything to be done. 'It was merely preparation for possible action in some proceeding which may be instituted in the future.' *United States v. Los Angeles & S. L. R. Co.*, 273 U. S. 299, 310. The determination is thus not enforceable by the Commission; the only action which could ever be taken on it would be by some other body. • • •

(p. 601) "In order not to fail in the performance of these duties the Mediation Board had to satisfy itself whether the South Shore was a railroad within the exemption proviso. To that end, it applied to the Commission for its determination. If it had omitted to do so, the application might have been made 'upon complaint of any party interested.' The determination whether applied for by the Board, by a carrier, or by employees, is clearly not an order enforceable within the meaning of the cases construing and applying the Urgent Deficiencies Act. It is a decision on a controverted matter, comparable to those considered in *United States v. Los Angeles & Salt Lake R. Co.*, 273 U. S. 299, in *Great Northern Ry. Co. v. United States*, 277 U. S. 172, in *United States v. Atlanta, B. & C. R. Co.*, 282 U. S. 522, and in *United States v. Griffin, ante*, p. 226, which were held not to be subject to review under the Urgent Deficiencies Act."

Again, in *Shields v. Utah Idaho Central Railroad Company*, 305 U. S. 177 (1938) (Mr. Chief Justice Hughes), the Supreme Court of the United States reaffirmed the doctrine that a mere finding that a carrier is not an interurban railway and therefore is not exempt from the operation of the Railway Labor Act is not an order and is not reviewable under the Urgent Deficiencies Act. Mr. Chief Justice Hughes, speaking for the Court, said (305 U. S. 177, 179, 182-183):

(p. 179) "The Railway Labor Act, which applies to railroads engaged in interstate commerce, excepts any 'interurban' electric railway unless it is operating as a part of a general steam-railroad system of transportation. The Interstate Commerce Commission is 'authorized and directed upon request of the Mediation Board or upon complaint of any party interested to determine after hearing whether any line operated by electric power' falls within the exception. At the request of the Mediation Board, the Interstate Commerce Commission after hearing determined that the lines of respondent, the Utah Idaho Central Railroad Company, do not constitute an interurban electric railway. 214 I. C. C. 707. * * *

(pp. 182-183) "We have held that the determination of the Commission is not an '*order*' reviewable under the Urgent Deficiencies Act of October 22, 1913. *Shannahan v. United States, supra.* * * *"

In *Canadian River Gas Company v. Federal Power Commission*, 110 F. (2d) 350 (1940) (C. C. A. 10) (Phillips, Circuit Judge), the Circuit Court of Appeals for the Tenth Circuit held that a mere finding by the Federal Power Commission that the Canadian River Gas Company is a natural gas company within the meaning of the Natural Gas Act, is not reviewable under Section 19(b) of the Act, even though the finding was accompanied by a preliminary, interlocutory, and interim order. The court said at page 352:

"Sec. 717r (b) provides that any party to a proceeding under the Natural Gas Act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the Circuit Court of Appeals of the United States for any circuit wherein the natural gas company to which the order relates is located or has its principal place of business, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part.

"It will be observed that the order of March 14, 1939, finds that the companies are natural gas companies within the meaning of the Natural Gas Act, and that it is necessary and proper, in the public interest, and to aid in the enforcement of the Natural Gas Act, that an investigation be instituted by the Commission, on its own motion, into and concerning rates, charges, classifications, rules, regulations, practices, and contracts of such companies, and orders that an investigation of such companies 'be and is hereby instituted.'

"It is in no proper sense a definitive order. Rather, it is a mere step in procedure. It neither commands nor inhibits any action on the part of the companies.

Furthermore, no orders theretofore made by the Commission respecting the companies remained unexecuted. They had fully complied with general orders Nos. 51 and 53."

In denying the rehearing on its order of dismissal, the Circuit Court of Appeals for the Tenth Circuit further said in *Canadian River Gas Company v. Federal Power Commission*, 113 F. (2d) 1010 (C. C. A. 10) (1940) (Phillips, Circuit Judge), at pages 1012-1013:

"It is true that order No. 51 of the Commission directed an investigation to determine what persons are natural gas companies within the meaning of the Natural Gas Act and it is urged that the finding in the order of March 14, 1939, was the culmination of that proceeding and in effect commands obedience by the companies with the provisions of the Natural Gas Act. We do not so regard the finding sought to be reviewed. It was made in the order of March 14, 1939, ordering an investigation. It was nothing more than a preliminary finding in a proceeding in which a definitive order has not yet been entered. As stated in our former opinion, 110 F. 2d 350, 352, 'It is a mere step in procedure. It neither commands nor inhibits any action on the part of the companies.'

"Counsel for the companies urge that the question of jurisdiction by virtue of the challenged finding will become *res judicata* and that they will be estopped from challenging the Commission's jurisdiction in any proceeding to review a future order of the Commission. The attitude taken by the Commission in this proceeding and our decision precludes that eventuality."

To the same effect is *New York State Natural Gas Company v. Federal Power Commission* (C. C. A. 2nd, October 26, 1939, unreported), where it was held that a mere finding of the Federal Power Commission that the New York State Natural Gas Company is a "natural gas company" within the meaning of the Natural Gas Act, is

not reviewable under Section 19(b) of the Act, even though accompanied by an interim, procedural and interlocutory order. The decision of the Circuit Court of Appeals for the Second Circuit, sustaining the Federal Power Commission's motion to dismiss follows:

> "Petition for review dismissed on the authority *Federal Power Commission v. Metropolitan Edison Company*, 304 U. S. 375, and *Rochester Telephone Company v. United States*, 307 U. S. 125."

Again, in *East Ohio Gas Company v. Federal Power Commission*, 115 F. (2d) 385 (1940) (C. C. A. 6th) (Simons, Circuit Judge), the Circuit Court of Appeals for the Sixth Circuit held that a mere determination of the Federal Power Commission that The East Ohio Gas Company is a natural gas company within the meaning of the Natural Gas Act, is not reviewable under Section 19(b) of the Act, even though the determination is accompanied by a preliminary, procedural, and interlocutory order. The Court said at pages 388-389:

> "(3-5) The order here sought to be reviewed declares the status of the petitioner as a natural gas company, but such status does not necessarily or immediately carry a direction of obedience to any mandatory order applicable to all having such status. The petitioner seeks to bring itself within the rationalization of the Rochester decision (*Rochester Telephone Corporation v. United States*, 307 U. S. 125), by the contention that the Commission's order No. 51 becomes binding upon it by virtue of the Commission's determination of its status, and by the asserted inference that the Commission has under contemplation and will make other general orders applicable to all natural gas companies. But General Order No. 51 has already been complied with by the petitioner—it is no longer the subject of controversy—and mere expectation that other orders of the Commission may follow does not presently impose upon the petitioner any necessary or immediate mandate which, under the reasoning of the

*Rochester* case, makes determination of status reviewable. * * *"

In *Federal Power Commission v. Metropolitan Edison Company*, 304 U. S. 375 (1938) (Mr. Chief Justice Hughes), the Chief Justice said at page 385:

"* * * A final report by the Commission on value under sec. 19a of the Interstate Commerce Act, though called an order, is not reviewable. *United States v. Los Angeles & Salt Lake R. Co.*, *supra*. Compare *United States v. Atlanta, B. & C. R. Co.*, 282 U. S. 522, 527; *Great Northern Ry. Co. v. United States*, 277 U. S. 172, 181, 182; *United States v. Griffin*, 303 U. S. 226; *Shannahan v. United States*, 303 U. S. 596. * * *"

In the leading case of *United States v. Los Angeles and Salt Lake Railroad Company*, 273 U. S. 299 (1927) (Mr. Justice Brandeis), Mr. Justice Brandeis, speaking for the court, pointed out that a finding of valuation by the Interstate Commerce Commission, even though called an order, is not reviewable merely because it may be prima facie evidence of the facts found in some other proceeding before a court or commission. Mr. Justice Brandeis said at pages 309-312:

"The so-called order here complained of, is one which does not command the carrier to do, or to refrain from doing, any thing; which does not grant or withhold any authority, privilege or license; which does not extend or abridge any power or facility; which does not subject the carrier to any liability, civil or criminal; which does not change the carrier's existing or future status or condition; which does not determine any right or obligation. This so-called order is merely the formal record of conclusions reached after a study of data collected in the course of extensive research conducted by the Commission, through its employees. It is the exercise solely of the function of investigation. Compare *Smith v. Interstate Commerce Commission*, 245 U. S. 33. Moreover, the investigation made was not a step in a pending proceeding in which an order of the character of those hereto

be judicially reviewable could be entered later. It was merely preparation for possible action in some proceeding which may be instituted in the future—preparation deemed by Congress necessary to enable the Commission to perform adequately its duties, if and when occasion for action shall arise. The final report may, of course, become a basis for action by the Commission, as it may become a basis for action by Congress or by the legislature or an administrative board of a State. But so may any report of an investigation, whether made by a committee of Congress or by the Commission pursuant to a resolution of Congress or of either branch thereof.

"The Valuation Act requires that the investigation and study be made of the properties of each of the rail carriers. There are about 1800. 40 Annual Report Interstate Commerce Commission, 13. In directing the Commission to investigate the value of the property of the several carriers, Congress prescribed in detail the subjects on which findings should be made, and constituted the 'final valuations' and 'the classification thereof' *prima facie* evidence, in controversies under the Act to Regulate Commerce. Every party in interest is, therefore, entitled to have and to use this evidence; and the carrier, being a party in interest, has the remedy by mandamus to compel the Commission to make a finding on each of the subjects specifically prescribed. *Kansas City Southern Ry. Co. v. Interstate Commerce Commission*, 252 U. S. 178. But Congress did not confer upon the courts power either to direct what this 'tribunal appointed by law and informed by experience,' *Illinois Central Ry. Co. v. Interstate Commerce Commission*, 206 U. S. 441, 454, shall find, or to annul the report, because of errors committed in making it. Moreover, errors may be made in the final valuation of the property of each of the nearly 1800 carriers. And it is at least possible that no proceeding will ever be instituted, either before the Commission or a court, in which the matters now complained of will be involved or in which the errors alleged will be of legal significance.

"The mere fact that Congress has, in terms, made 'all final valuations * * * and the classification thereof * * * *prima facie* evidence of the value of the property in all proceedings under the Act to Regulate Commerce * * * in all judicial proceedings for the enforcement of the Act * * * and in all judicial proceedings brought to enjoin, set aside, annul, or suspend, in whole or in part, any order of the Interstate Commerce Commission" is, obviously, not a violation of the due process clause justifying proceedings to annul the order. That to make the Commission's conclusions *prima facie* evidence in judicial proceedings is not a denial of due process, was settled by *Meeker v. Lehigh Valley R. R. Co.*, 236 U. S. 412, 430, 431. It was there said of a like provision relating to reparation orders: 'This provision only establishes a rebuttable presumption. It cuts off no defense, interposes no obstacle to a full contestation of all the issues, and takes no question of fact from either court or jury. At most therefore it is merely a rule of evidence.' See also *Mills v. Lehigh Valley R. R. Co.*, 238 U. S. 473, 481-482; *St. Louis Southwestern Ry. Co. v. United States*, 264 U. S. 64, 77.

"Nor does the fact that 'all final valuations * * * and the classifications thereof' are made *prima facie* evidence prevent the report from being solely an exercise of the function of investigation. Data collected by the Commission as a part of its function of investigation, constitute ordinarily evidence sufficient to support an order, if the data are duly made part of the record in the case in which the order is entered. See *Interstate Commerce Commission v. Louisville & Nashville R. R. Co.*, 227 U. S. 88, 93; *Chicago Junction Case*, 264 U. S. 258, 262; *United States v. Abilene & Southern Ry. Co.*, 265 U. S. 274, 286-290; Act of June 18, 1910, c. 309, sec. 13, 36 Stat. 539, 555. Inquests and inquisitions, if they were expressly authorized, are, at common law, admissible in evidence in judicial proceedings, thus constituting an exception to both the hearsay rule and the rule against opinion evidence. 3 *Wigmore on Evidence* (2d ed.), secs. 1671-1674. Some inquests are at common law also *prima facie* evidence of the facts found. *Hughes v. Jones*, 116 N. Y. 67."

Assuming arguendo that the Federal Power Commission's findings as to lawfulness of past rates are binding upon the parties and privies to the Hope case in another proceeding before some court or commission, unless unsupported by evidence or otherwise unlawful, they are nevertheless not an order and not reviewable here or now. The Supreme Court has held that the mere fact that findings by the Interstate Commerce Commission are binding in another proceeding between the same parties before the Railway Mediation Board where they are subject to challenge only upon the ground that they are not supported by substantial evidence, does not make them an "order" subject to immediate judicial review. *Shields v. Utah Idaho Central Railroad Company*, 305 U. S. 177 (1938), *supra*; *Shannahan v. United States*, 303 U. S. 596, *supra*.

In the recent case of *American Federation of Labor v. National Labor Relations Board*, 308 U. S. 401 (1940) (Mr. Justice Stone), the Supreme Court held that a certification by the National Labor Relations Board that a particular labor organization of longshore workers is a collective bargaining representative of the employees in a designated unit, composed of numerous employers of longshore workers at Pacific Coast ports, was not reviewable as an "order" within the meaning of Section 10 (f) of the Wagner Act. Mr. Justice Stone, speaking for the Court, said at pages 408-412:

> "In analyzing the provisions of the statute in order to ascertain its true meaning, we attribute little importance to the fact that the certification does not itself command action. Administrative determinations which are not commands may for all practical purposes determine rights as effectively as the judgment of a court, and may be reexamined by courts under particular statutes providing for the review of 'orders.' See *Rochester Telephone Corp. v. United States*, 307 U. S. 125, 130, 135, *et seq.*; *Federal Power Comm'n v. Pacific Power & Light Co.*, 307 U. S. 156. We must

look rather to the language of the statute, read in the light of its purpose and its legislative history, to ascertain whether the 'order' for which the review in court is provided, is contrasted with forms of administrative action differently described as a purposeful means of excluding them from the review provisions.

"Here it is evident that the entire structure of the Act emphasizes, for purposes of review, the distinction between an 'order' of the Board restraining an unfair labor practice and a certification in representation proceedings. The one authorized by § 10 may be reviewed by the court on petition of the Board for enforcement of the order, or of a person aggrieved, in conformity to the procedure laid down in § 10, which says nothing of certifications. The other, authorized by § 9, is nowhere spoken of as an order, and no procedure is prescribed for its review apart from an order prohibiting an unfair labor practice. The exclusion of representation proceedings from the review secured by the provisions of § 10 (f) is emphasized by the clauses of § 9 (d), which provide for certification by the Board of a record of a representation proceeding only in the case when there is a petition for review of an order of the Board restraining an unfair labor practice. The statute on its face, thus indicates a purpose to limit the review afforded by § 10 to orders of the Board prohibiting unfair labor practices, a purpose and a construction which its legislative history confirms.

* * * * *

"An argument, much pressed upon us, is, in effect, that Congress was mistaken in its judgment that the hearing before the Board in proceedings under § 9 (c), with review only when an order is made under § 10 (c) directing the employer to do something 'provides an appropriate safeguard and opportunity to be heard.' House Rep. p. 23, and that 'this provides a complete guarantee against arbitrary action by the Board,' Sen. Rep., p. 14. It seems to be thought that this failure to provide for a court review is productive of peculiar hardships, which were perhaps not foreseen in cases where the interests of rival unions are affected. But

these are arguments to be addressed to Congress and not the courts. The argument too that Congress has infringed due process by withholding from federal appellate courts a jurisdiction which they never possessed is similarly without force. *Shannahan v. United States*, 303 U. S. 596; see *In re National Labor Relations Board*, 304 U. S. 486, 495.

"The Board argues that the provisions of the Wagner Act, particularly § 9 (d), have foreclosed review of its challenged action by independent suit in the district court, such as was allowed under other acts providing for a limited court review in *Shields v. Utah Idaho Central R. Co.*, 305 U. S. 177, and in *Utah Fuel Co. v. National Bituminous Coal Comm'n*, 306 U. S. 56; cf. *Myers v. Bethlehem Shipbuilding Corp.*, 303 U. S. 41. But that question is not presented for decision by the record before us. Its answer involves a determination whether the Wagner Act, in so far as it has given legally enforceable rights, has deprived the district courts of some portion of their original jurisdiction conferred by § 24 of the Judicial Code. It can be appropriately answered only upon a showing in such a suit that unlawful action of the Board has inflicted an injury on the petitioners for which the law, apart from the review provisions of the Wagner Act, affords a remedy. This question can be properly and adequately considered only when it is brought to us for review upon a suitable record."

Even if the Federal Power Commission had stated in its findings that it expected petitioner to pay back to its affiliate The East Ohio Gas Company the $8,200,000 which the Commission found Hope had overcharged East Ohio during the past 3½ years, as it did not, the Federal Power Commission's findings would still not be an order and would still not be reviewable. In *United States v. Atlanta, Birmingham and Coast Railroad Company*, 282 U. S. 522 (1931) (Mr. Justice Brandeis), the United States Supreme Court held that a report of the Interstate Commerce Commission which contained the following statement was not

an order and was therefore not reviewable under the Urgent Deficiencies Act:

> "'Upon consideration of the record, as supplemented, we find and conclude that the amount to be included in the balance sheet statement of the new company representing investment in road and equipment as of January 1, 1927, may not exceed $9,261,043.87. The company will be expected to adjust its accounts in accordance with this finding within 60 days from service of this report.'"

Mr. Justice Brandeis, speaking for the court, said at pages 527-528:

> "*First.* The jurisdiction conferred upon district courts under the Urgent Deficiencies Act is that formerly exercised by the Commerce Court over 'cases brought to enjoin, set aside, annul, or suspend in whole or in part any order of the Interstate Commerce Commission.' Act of June 18, 1910, c. 309, sec. 1, 36 Stat. 539. The action here complained of is not in form an order. It is a part of a report—an opinion as distinguished from a mandate. The distinction between a report and an order has been observed in the practice of the Commission ever since its organization—and for compelling reasons. Its functions are manifold in character. In some matters its duty is merely to investigate and to report facts. See *United States v. Los Angeles & Salt Lake R. Co.*, 273 U. S. 299, 310. In others, to make determinations. See *Great Northern Ry. Co. v. United States*, 277 U. S. 172. In some, it acts in an advisory capacity. Compare *Minneapolis & St. Louis R. Co. v. Peoria & Pekin Union Ry. Co.*, 270 U. S. 580, 584-5. In others in a supervisory. Even in the regulation of rates, as to which the Commission possesses mandatory power, it frequently seeks to secure the desired action without issuing a command. In such cases it customarily points out in its report what the carriers are expected to do. Such action is directory as distinguished from mandatory. No case has been found in which matter embodied in a report and not followed by a formal order has been held to be subject to judicial review. * * *"

Finally, in *Great Northern Railway Company v. United States*, 277 U. S. 172 (1928) (Mr. Justice Brandeis), the opinion of the Supreme Court points out that a finding of the Interstate Commerce Commission contained in a certificate issued by the Commission to the Secretary of the Treasury under Sectio.. 209, Transportation Act, 1920, setting forth the amount required of the United States to make good to a railroad company its guaranty of operating income during the six months following the termination of federal control, and stating also the aggregate amount theretofore certified, and thus showing (in this case) an overpayment by the government, is not an order. Mr. Justice Brandeis said at page 180:

> "Transportation Act, 1920, did not confer upon the Commission power to order anything in connection with the issue of the certificates. There is in the certificates no direction, no word of command. They are the recital of a finding of fact. * * *"

It is respectfully submitted that the Federal Power Commission's "Findings as to Lawfulness of Past Rates" are not reviewable because they are what the Commission called them—mere findings.

**B. The Federal Power Commission's "Findings as to Lawfulness of Past Rates" are not an "order."**

In *Louisville Gas and Electric Company v. Federal Power Commission*, 129 F. (2d) 126 (C. C. A. 6, June 29, 1942), the Circuit Court of Appeals for the Sixth Circuit held that it had jurisdiction to review orders of the Federal Power Commission which determined the original cost of the petitioner's property and in connection therewith directed the petitioner to establish accounting records and to conform its books and records to the Commission's determination of original cost. But the Court there distinguished that case from the case of a mere finding. The Court said at p. 131:

> * * * "So here the direction of the commission that the licensee establish accounts showing a debit balance in its fixed capital assets was an affirmative, determinative order directing action, *was more than a mere finding*, and its mandate entails more than a mere preservation of evidence. Compare *East Ohio Gas Company v. Federal Power Commission*, 6 Cir., 115 F. (2d) 385."

There is no claim here that the Federal Power Commission's "Findings as to Lawfulness of Past Rates" impose any duty upon petitioner to obey any unexecuted, previously formulated mandatory orders of the Federal Power Commission. The case is therefore clearly distinguishable from *Rochester Telephone Corporation v. United States*, 307 U. S. 125. As Phillips, Circuit Judge, said in *Canadian River Gas Company v. Federal Power Commission*, 110 F. (2d) 350, 352-353 (1940) (C. C. A. 10th), *supra*:

> "We think the case is distinguishable from *Rochester Tel. Corp. v. United States*, 307 U. S. 125, 59 S. Ct. 754, 764, 83 L. Ed. 1147. * * *
>
> "In the instant case, there were no unexecuted, previously formulated, mandatory orders, nor did the order of March 14, 1939, in itself direct or inhibit any action on the part of the companies. It can only adversely affect the rights of the Canadian Company and the Colorado Company on the contingency of future administrative action. * * *"

Nor is it claimed in this case that the Federal Power Commission's "Findings as to Lawfulness of Past Rates" impose any duty upon petitioner to obey any statutory regulations which interfere with its freedom of conduct, or that the Federal Power Commission's findings compel specific actions by the Company and prohibit other actions by it. The "findings" in the instant case determine no status. The case is therefore distinguishable from *Jersey Central Power and Light Company v. Federal Power Commission* (C. C. A. 3d) (May 25, 1942) (Biggs, Circuit Judge), 129 F. (2d) 183. In that case, the United States

Court of Appeals for the Third Circuit held a determination of the Federal Power Commission that Jersey Central was a public utility within the meaning of the Federal Power Act and that Jersey Power had acquired securities in violation of Section 203(a) of that act, reviewable as an "order." In holding the Federal Power Commission's determination reviewable under the *Rochester* case, 307 U. S. 125, *supra*, Biggs, Circuit Judge, said (p. 191):

> • • • "The 'Determination by the Commission' at bar is analogous to the orders in the second group described by Mr. Justice Frankfurter, orders imposing statutory obligations and prohibitions and it should follow that this court has jurisdiction to review the action of the Federal Power Commission which makes Jersey Central subject not only to statutory regulations which interfere with its freedom of conduct but compel specific actions by the Company and prohibit other actions by it."

Finally, these "findings" are wholly unlike an order promulgating general legislative rules and regulations having the force of law which require the Commission to refuse a corporation renewal of a license if it does not comply with the rules and regulations, thereby putting the party under duress to take immediate action. Cf. *Columbia Broadcasting System, Inc. v. United States*, . . . U. S. . . . , 86 L. Ed. (Advanced Opinion) 1066, 62 S. Ct. 1194 (June 1, 1942) (Mr. Chief Justice Stone) (Justices Frankfurter, Douglas and Reed, dissenting). In that case, where the Supreme Court held the order reviewable, Mr. Chief Justice Stone said at pages 1203-1204 of the Supreme Court Reporter:

> "We need not stop to discuss here the great variety of administrative rulings which, unlike this one, are not reviewable—either because they do not adjudicate rights or declare them legislatively, or because there are adequate administrative remedies which must be pursued before resorting to judicial remedies; or, be-

cause there is no occasion to resort to equitable remedies." * * *

We also respectfully call the attention of the Court to the following language in the dissenting opinion of Mr. Justice Frankfurter in the *Columbia Broadcasting* case (62 S. Ct. 1206, 1213-1214) which, apart from the moot question whether it stated the law upon the facts of that case, is clearly applicable here:

> "The criteria governing judicial review of 'orders' under the Urgent Deficiencies Act were defined by a unanimous Court in *United States v. Los Angeles & S. L. R. R.*, 273 U. S. 299, 309, 310, 47 S. Ct. 413, 414, 71 L. Ed. 651: 'The so-called order here complained of is one which does not command the carrier to do, or to refrain from doing, any thing; which does not grant or withhold any authority, privilege, or license; which does not extend or abridge any power or facility; which does not subject the carrier to any liability, civil or criminal; which does not change the carrier's existing or future status or condition; which does not determine any right or obligation.' If 'broadcasting company' were substituted for 'carrier,' this analysis of the legal consequences of the action of the Interstate Commerce Commission in the *Los Angeles* case would fit perfectly the legal consequences of the action of the Federal Communications Commission in making public the challenged regulations.
>
> "The fact that an action of an administrative agency occasions even irreparable loss does not in itself afford sufficient grounds for judicial review. Even if the Commission committed a wrong, the question of judicial reviewability still remains that put in the *Los Angeles* case, 273 U. S. at page 313, 47 S. Ct. page 416, 71 L. Ed. 651, to wit, it is 'a wrong for which Congress provides a remedy under the Urgent Deficiencies Act' of October 22, 1913, 38 Stat. 208, 219, 28 U. S. C. A. § 47, as incorporated in § 402 (a) of the Communications Act of 1934, 47 U. S. C. A. § 402 (a).
>
> "For Congress has not authorized resort to the federal courts merely because someone feels aggrieved.

however deeply, by an action of the Federal Communications Commission. A District Court of the United States can take a case only when Congress has authorized that type of case to be taken. Congress did not leave opportunity for reviewing damaging action by the Federal Communications Commission to the general equity powers of the district courts. It circumscribed the power of the courts in relation to the Commission in the most detailed way. Its incorporation by reference, in the Communications Act of 1934, 47 U. S. C. A. § 151 *et seq.*, of the scope of review allowed in reviewing an 'order' of the Interstate Commerce Commission gave all the precise, definite, and technical boundaries which the concept of a reviewable 'order' had acquired through the decisions of this Court prior to the enactment of the Communications Act. The precise requirements of an 'order' of the Commission for purposes of judicial review are therefore as inflexible as though they were written into the Act itself.

* * *

"Hardship there may well come through action of an administrative agency. But to slide from recognition of a hardship to assertion of jurisdiction is once more to assume that only the courts are the guardians of the rights and liberties of the people. In denying that it had power to review the action of the Federal Communications Commission because that body had not yet determined a legal right, the court below, as Judge Learned Hand's opinion abundantly proves, was not respecting a rule of etiquette. On the contrary, it merely recognized that the federal courts are entrusted with the correction of administrative errors or wrongdoing only to the extent of Congressional authorization. To say that the courts should reject the doctrine of administrative finality and take jurisdiction whenever action of an administrative agency may seriously affect substantial business interests, regardless of how intermediate or incomplete the action may be, is, in effect, to imply that the protection of legal interests is entrusted solely to the courts. The unbroken current of this Court's decisions, in con-

struing the scope of judicial review under the Urgent Deficiencies Act, and which is the only warrant for jurisdiction in this case, repels such a conclusion. The decision should therefore be affirmed."

It is respectfully submitted that the Federal Power Commission's "Findings as to Lawfulness of Past Rates" are not reviewable here because they are not an "order."

## CONCLUSION.

Since, the "Findings as to Lawfulness of Past Rates" entered by respondent, Federal Power Commission, on May 26, 1942, do not constitute an "order" within the meaning of Section 19(b) of the Natural Gas Act; and

Since, Congress has authorized this Honorable Court to review only an "order" of the Federal Power Commission, and has not authorized the review of mere "findings" of the Commission;

Therefore, it is respectfully submitted that the motion of respondent, City of Cleveland, to dismiss Part B of the Petition for Review should be granted.

Respectfully submitted,

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SPENCER W. REEDER,
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*Attorneys for Respondent, City of Cleveland.*

September 11, 1942.

# UNITED STATES OF AMERICA
# FEDERAL POWER COMMISSION

*Commissioners*: LELAND OLDS, *Chairman*, CLAUDE L. DRAPER, BASIL MANLY and CLYDE L. SEAVEY. JOHN W. SCOTT, dissenting in part.

May 26, 1942

| | |
|---|---|
| CITY OF CLEVELAND, *Complainant*, vs. HOPE NATURAL GAS COMPANY, *Defendant*. | DOCKET NO. G-100 |
| CITY OF AKRON, *Complainant*, vs. HOPE NATURAL GAS COMPANY, *Defendant*. | DOCKET NO. G-101 |
| PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Complainant*, vs. HOPE NATURAL GAS COMPANY, *Defendant*. | DOCKET NO. G-127 |
| In the Matter of HOPE NATURAL GAS COMPANY. | DOCKET NO. G-113 |

## FINDINGS AS TO LAWFULNESS OF PAST RATES.

Upon consideration of the City of Cleveland's complaint and amendment, the Company's answers, the petitions and orders previously entered in these proceedings, the evidence of record, the briefs and oral arguments,

and the Commission having on this date entered and issued its Opinion No. 76 and order, which Opinion is hereby incorporated by reference and the appropriate portions are made a part hereof;

The Commission *finds* that:

(1) The City of Cleveland raised the issue of the lawfulness of the rate charged The East Ohio Gas Company by Hope Natural Gas Company, and requested this Commission to find the just, reasonable and lawful rate from June 30, 1939, to the date of this determination, as an aid to State regulation;

(2) The Commission has jurisdiction and authority to make such findings which are in the public interest;

(3) Hope Natural Gas Company is a corporation organized and existing under the laws of the State of West Virginia;

(4) Hope Natural Gas Company purchases and produces natural gas within the State of West Virginia;

(5) Hope Natural Gas Company transports, delivers and sells large quantities of the natural gas referred to in Finding (4) to The East Ohio Gas Company at points on and along the interstate boundary between the States of West Virginia and Ohio, which gas is so transported and sold at wholesale for the purpose of resale for ultimate public consumption at points outside the State of West Virginia;

(6) The transportation and sale of natural gas by Hope Natural Gas Company stated in Finding (5) constitute the transportation and sale of natural gas in interstate commerce within the purview of the Natural Gas Act, and the rates charged and collected by Hope for the gas so transported and sold have been subject to the exclusive jurisdiction of this Commission since June 21, 1938;

(7) The evidence of reproduction cost new of the Hope Company's property used and useful in the

production, transportation, delivery and sale of natural gas to its five interstate wholesale purchasers (as of December 31, 1938), as presented by the Company in these proceedings is hypothetical, conjectural and inherently fallacious and cannot be considered as having probative value in the determination of the allowable rate base;

(8) The evidence of the trended "original cost" of Hope Company's property (as of December 31, 1938), as presented by the Company, is basically erroneous and cannot be considered as having probative value in the determination of the allowable rate base;

(9) The Hope Company's restated "original cost" of its property (as of December 31, 1938) erroneously includes items and amounts in excess of the actual legitimate cost thereof as such cost is controlled by fundamental principles of cost determination, and as defined in the Federal Power Commission's Uniform System of Accounts and by decisions of this Commission;

(10) Equity and justice require the elimination of such erroneously included items and amounts referred to in Finding (9) in determining the rate base upon which the Company is entitled to earn a fair rate of return;

(11) The actual legitimate cost of Hope Natural Gas Company's property, excluding distribution property, property used to transport coke-oven gas, and unoperated acreage, was $51,019,585 for 1939 and $51,957,416 for 1940;

(12) The actual existing depletion and depreciation in Hope Natural Gas Company's property was $21,737,823 for 1939 and $22,328,016 for 1940, and the resulting actual legitimate cost, less actual existing depletion and depreciation, and excluding distribution property, property used to transport coke-oven gas and unoperated acreage, was $29,281,762 for 1939 and $29,629,400 for 1940;

(13) The unoperated acreage was useful or imminently useful and the actual legitimate cost of such acre-

age in the amounts of $567,152 for 1939 and $566,105 for 1940 should be included in the rate bases;

(14) Materials and supplies and cash working capital were necessary in the amounts of $2,100,000 for 1939 and $2,125,000 for 1940, and should be allowed in the rate bases;

(15) For the purpose of determining what rates were just, reasonable and lawful since June 30, 1939, the average rate base represented by the actual legitimate cost of Hope Natural Gas Company's property used and useful in rendering interstate service (Finding (12)), plus the cost of unoperated acreage and the necessary working capital, was $32,326,398 for 1939, $32,134,740 for 1940, and $33,712,526 since 1940;

(16) A rate of return of 6½% was liberal for the period of June 30, 1939, to date;

(17) The actual operations for 1939 and 1940 are the reasonable and proper bases for determining lawful rates in those years, and 1940 operations, as adjusted, are the reasonable and proper basis for determining lawful rates since 1940;

(18) The operating revenues from interstate sales were $14,866,894 for 1939 and $19,296,755 for 1940;

(19) The proper credit to Hope Natural Gas Company's operating expenses for the excess profits from the gasoline and butane extracted from its gas by its affiliate, Hope Construction & Refining Company, and for steam and boiler fuel furnished the affiliate, was $352,516 for 1939, $304,697 for 1940 and $304,697 annually since 1940;

(20) Reasonable and proper allowances for operating expenses (including amortization of reclassification and rate case expenses) and after allocation of costs to local West Virginia sales, miscellaneous gas revenues and the amount of tax required under lawful rates, are as follows:

| | 1939 | 1940 | Since 1940 |
|---|---|---|---|
| Operating Expenses | $14,242,454 | $15,775,195 | $16,272,934 |
| Miscellaneous Gas Revenues | (68,695) | (83,275) | (83,275) |
| Allocation of Costs to Local West Virginia Sales | (2,328,110) | (2,694,075) | (2,694,075) |
| Total Deductions from Interstate Revenues | $11,845,649 | $12,997,845 | $13,495,584 |

(21) The rates charged and received by the Company for the transportation and sale of natural gas in interstate commerce for resale for ultimate public consumption were unjust, unreasonable and excessive, and therefore unlawful, to the extent of $920,029 for the year 1939, $4,210,154 for the year 1940, and $3,609,857 since 1940 (on an annual basis), determined as follows:

| | 1939 | 1940 | Since 1940 |
|---|---|---|---|
| Revenues from Interstate Sales | $14,866,861 | $19,296,755 | $19,296,755 |
| Operating Deductions | 11,845,649 | 12,997,845 | 13,495,584 |
| Net Operating Income from Interstate Sales | 3,021,245 | 6,298,910 | 5,801,171 |
| 6½% Return on Interstate Rate Base | 2,101,216 | 2,088,756 | 2,191,314 |
| Excess | $ 920,029 | $ 4,210,154 | $ 3,609,857 |

(22) The total required revenue for all interstate service of the company was $13,946,867 for 1939, $15,086,601 for 1940 and $15,686,898 annually since 1940;

(23) Cost, conditions and characteristics of service show that the just, reasonable and lawful rates for natural gas sold by Hope Natural Gas Company in interstate commerce to The East Ohio Gas Company for resale for ultimate public consumption were those required to produce compensation in the amount of $11,528,608 for 1939, $11,567,185 for 1940, and $11,910,947 annually since 1940;

(24) The rates charged and received by the Hope Natural Gas Company for the transportation and sale of natural gas in interstate commerce to The East Ohio Gas Company for resale for ultimate public consumption were unjust, unreasonable, excessive,

and therefore unlawful to the extent of $830,892 during 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940.

By the Commission.

LEON M. FUQUAY,
*Secretary.*

# UNITED STATES OF AMERICA
# FEDERAL POWER COMMISSION

## OPINION NO. 76.

| | |
|---|---|
| CITY OF CLEVELAND, *Complainant,* vs. HOPE NATURAL GAS COMPANY, *Defendant.* | DOCKET NO. G-100 |
| CITY OF AKRON, *Complainant,* vs. HOPE NATURAL GAS COMPANY, *Defendant.* | DOCKET NO. G-101 |
| PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Complainant,* vs. HOPE NATURAL GAS COMPANY, *Defendant.* | DOCKET NO. G-127 |
| IN THE MATTER OF HOPE NATURAL GAS COMPANY. | DOCKET NO. G-113 |

APPEARANCES.

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Hon. John J. D. Preston
Hon. E. B. Pennypacker
Hon. C. E. Nethken
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## OPINION

By the Commission:

These proceedings grew out of complaints filed by the cities of Cleveland and Akron, Ohio, and were enlarged by the Commission's Order of October 14, 1938, for an investigation of the reasonableness of all the interstate wholesale

rates of Hope Natural Gas Company under the provisions of the Natural Gas Act.[1]

The cities of Cleveland and Akron, Ohio, filed with the Commission complaints alleging that the price charged by Hope Natural Gas Company to East Ohio Gas Company for natural gas was unreasonable and unduly discriminatory. The Pennsylvania Public Utility Commission also filed a complaint asserting that the rates charged by Hope Natural Gas Company to Peoples Natural Gas Company, Fayette County Gas Company and the Manufacturers Light and Heat Company were unlawful.

The three complaint proceedings and the proceeding instituted by the Commission were consolidated for purposes of hearing. Upon petition, the Public Service Commission of West Virginia, the State of West Virginia and the City of Toledo, Ohio, were permitted to become interveners in the consolidated proceedings.

Hearings were held, pursuant to order and notice, at intervals during 1940 at which Hope presented its case-in-chief. After written and oral argument the motion of the cities of Cleveland and Akron for an immediate order reducing rates to East Ohio Gas Company was denied for insufficiency of evidence. Additional hearings were conducted during the first half of 1941 and concluded in July. The evidence presented during the 43 days of hearings covered all issues and embraced nearly a gross of extensive exhibits and about 7,000 pages of transcript. Each party to these proceedings was cognizant of the issues and was afforded ample opportunity to present evidence. Comprehensive briefs have been filed and the Commission, sitting *en banc*, has heard extensive oral argument.

[1] The term "interstate wholesale", when used in this Opinion means the sale of natural gas in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use.

## JURISDICTION

The jurisdiction of the Commission was not challenged in these proceedings. The facts show and counsel for Hope Natural Gas Company have stipulated that Hope transports and sells natural gas in interstate commerce to five companies for resale for ultimate public consumption.[2] Hope is a natural gas company within the purview of the Natural Gas Act and we may proceed with the determination of the lawfulness of its interstate wholesale rates. See *Illinois Natural Gas Co. v. Central Illinois Public Service Co.*, 314 U. S. 498; *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ....

## OPERATIONS OF THE COMPANY

The Hope Natural Gas Company was organized in 1898 in West Virginia and is a subsidiary of Standard Oil Company (N. J.). Its property, composed of approximately 5,000 miles of pipe lines and 3,000 gas wells in West Virginia, is an integral part of the interconnected Standard Oil System which serves the Appalachian area with natural gas. The major customers of Hope are its affiliates, The East Ohio Gas Company and The Peoples Natural Gas Company, which serve a large area including Cleveland, Akron, Youngstown, Massillon, Canton, Pittsburgh and Altoona. Hope also sells gas to its affiliate, The River Gas Company, and to two non-affiliates, Fayette County Gas Company and The Manufacturers Light and

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[2] Hope's pipe lines interconnect with those of its five wholesale customers and the gas which it sells to those companies flows in interstate commerce without interruption and is resold in Ohio and Pennsylvania. Hope sells and delivers gas (1) to the East Ohio Gas Company and the River Gas Company at several points along the West Virginia-Ohio state boundary; (2) to the Peoples Natural Gas Company and the Fayette County Gas Company at points on the West Virginia-Pennsylvania state boundary; and (3) to the Manufacturers Light and Heat Company in northern West Virginia, which transports and sells such gas in Pennsylvania for ultimate public consumption.

Heat Company. Hope produces about one-third of its total annual gas requirements and purchases the remaining two-thirds under more than 300 contracts.[3]

In 1940, Hope handled about 74,000,000 m.c.f. of gas and sold: (1) more than 40,000,000 m.c.f. to East Ohio Gas Company; (2) about 10,000,000 m.c.f. to Peoples Natural Gas Company; (3) more than 2,000,000 m.c.f. to Manufacturers Light and Heat Company; (4) approximately 860,000 m.c.f. to Fayette County Gas Company; (5) nearly 400,000 m.c.f. to River Gas Company; and (6) more than 11,000,000 m.c.f. to local consumers in West Virginia. The remainder totaling about 9,000,000 m.c.f. was gas lost or used in Company operations.

Hope's natural gas is processed by an affiliate, Hope Construction & Refining Company, for the purpose of extracting the natural gasoline and butane. Another affiliate, the Domestic Coke Corporation, sells its by-product coke-oven gas to Hope for use as boiler fuel in Hope's main compressor station.[4]

## CORPORATE AND FINANCIAL HISTORY

Hope Natural Gas Company is a large, seasoned and successful utility, and during its corporate history of more than forty years its capital structure has been solely in the form of common stock. Since 1908, it has been a subsidiary of Standard Oil Company (N. J.) and all of its outstanding capital stock, having an aggregate par value of approximately $28,000,000, is owned by Standard.

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[3] Hope purchases coke-oven gas from the affiliated Domestic Coke Corp. and transports the gas to Hastings for use as compressor station fuel. It is agreed that the property and costs relating to that transaction be eliminated and the equivalent m.c.f. of natural gas be substituted at Hastings compressor station at a cost of 22¢ per m.c.f.

[4] Hope Natural Gas Company in December 1939 merged the former Reserve Gas Company, but by agreement between counsel that property and income have been segregated and excluded for the purposes of these proceedings.

During Hope's existence it has paid more than $108,000,000 in dividends, $11,000,000 of which were stock dividends. From 1898 to 1941 the average annual cash dividends to stockholders exceeded 20% on the average annual amount of capital stock issued for cash or other assets.

The Company presented its balance sheet as an exhibit, which shows an owner's equity in assets, at the end of 1938, of more than $33,000,000, comprising $28,000,000 of capital stock and $5,000,000 of surplus. This equity is represented in assets principally by gas plant in the net amount of $15,500,000, Government bonds of $11,000,000, and cash and investments of $5,500,000. The $15,500,000 net investment per books in the Company's gas plant, including distribution property, is actually about $8,000,000, because the Company had previously transferred $7,500,000 from depletion and depreciation reserves to earned surplus.[5]

We will now proceed to the pragmatic determination of the lawful rates, within the ambit of our statutory authority.

## RATE BASE

The Hope Company claimed a rate base of $66,000,000 and calculated that it was earning a rate of return of about 3% from its interstate business on that base. The claimed rate base was molded from an estimate of the cost

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[5] Source: Ex. No. 11, pp. 10 and 21; Ex. 61, p. 3.

| | |
|---|---|
| Plant, Dec. 31, 1938, per books (including Distribution Property of about $2,795,000) | $56,213,454 |
| Depreciation and depletion reserve, per books | 40,638,562 |
| | 15,574,892 |
| Less adjustments in 1934 ($5,901,000) and in 1908 ($1,650,000) transferring these amounts from depreciation and depletion reserve to earned surplus | 7,551,000 |
| Net Investment | $ 8,023,892 |

to reproduce the property less observed depreciation, plus working capital. The derived rate of return was based upon the Company's presentation of revenues and expenses averaged for 1937, 1938 and 1939.

## The Company's Estimates of Reproduction Cost and Trended "Original Cost"

The estimate of the Company approximated $97,000,000 for the cost to reproduce the property. That result was reached by applying unit prices for material and labor to an inventory and adding about 17% to that total for undistributed construction costs.

Many hypotheses were employed for this reproduction-cost estimate and each of them disregards the development and experience of the Hope Company. Quoted prices for pipe and other material, rather than actual current prices, were used and obsolete compressor station equipment was priced by applying quoted prices for modern equipment. The record demonstrates that the quoted price for pipe is not in fact the price that is paid. Actual prices are the result of negotiation. The calculated construction costs exceeded the actual pipe line construction costs experienced by the Hope Company during a recent period. This appraisal of the cost to reproduce the system included $14,000,000 for undistributed construction costs or overheads which ignored the experience of the Company with respect to such costs and the fact that Hope has charged all overhead expenditures (with minor exceptions) to operating expenses in the past. It is improper and inequitable to capitalize items formerly charged to operating expenses, and in rate making the inclusion of such expenses in the rate base would compel the rate payer to reimburse the Company more than once for the same item. We will discuss this point extensively in connection with the Company's claimed "original cost."

The Company's hypothetical reproduction cost estimate is nearly double the actual legitimate cost of the

property, although, as the record shows, the greater part of the property was constructed during the high-price period of 1917-1930.

After full consideration of the estimate of reproduction cost new presented by the Company, we find that it is not predicated upon facts and that it is too conjectural and illusory to be given any weight in these proceedings. See *Railroad Commission v. Pacific Gas & Electric Co.*, 302 U. S. 388, 397; *Re Canadian River Gas Co. et al.*, F. P. C. Op. 73.

The Company also presented a trended "original cost" estimate which exceeded $105,000,000. The objective of that estimate, according to the witness, was to reflect changes in price levels and to indicate what the original cost of the property would have been if 1938 material and labor prices had prevailed throughout the whole period of the piecemeal construction of the Company's property since 1898. At the outset this estimate includes a multi-million dollar error because the trend factors were applied to an inflated "original cost" claim of the Company, which we will discuss fully under the subject of actual legitimate cost. The evidence discloses fundamental errors in the trending process used. No consideration was given by the Company's witness to the great advances in the science of construction and the improvement in the quality of pipe and equipment in the natural gas industry, during the long history of the Company.

Hope Company's own experience demonstrates that man-hour productivity has increased greatly throughout the years during which the Company's property was constructed. Yet the Company's witness gave no consideration to that fact, but utilized high 1938 hourly wage-rates to price the slower obsolete construction methods of the past on a time basis. It is undisputed that service qualities of pipe, including increased tensile strength and reduced weight, have been improved in recent years. Pipe is sold on the basis of weight and the heavier and inferior pipe

in the Hope System was priced at 1938 prices for modern pipe, in disregard of the known improvements in the product. Another basic defect in the trending was the adoption of the arithmetical average of the cost per ton of smaller sizes of pipe when 95% of the cost of pipe in the Company's transmission lines represented pipe having greater diameters. That such a pipe trend is not representative is obvious. Furthermore, the 1938 prices upon which the trends were based, being representative of only slightly more than 1% of the total plant, furnished no dependable yardstick.

In the light of the evidence the conclusion is inescapable that the Company's trended "original cost" estimate is not founded in fact, but it is basically erroneous and produces irrational results.

The reproduction cost studies and the so-called trended "original cost" studies were the typical, hypothetical conjectures which have plagued rate regulation for more than forty years. The actual development and experience of the Hope Company were ignored. In addition, assumption upon assumption as to material and labor costs, and magnified imagination as to overheads were indulged in lavishly. The results have no probative value and accordingly must be condemned.[6]

The estimates of reproduction cost and trended "original cost" lack reliability, so we turn to the evidence of actual cost of Hope's property.

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[6] Under the recent decision of the Supreme Court involving the Natural Gas Act in *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ...., and the decision of this Commission in *Re Chicago District Electric Generating Corporation*, 39 P. U. R. (N. S.) 263, involving the companion part of the Federal Power Act, such estimates of reproduction cost and trended "original cost" need not have been admitted in evidence.

**Actual Legitimate Cost**

The Company and the Commission's Staff submitted exhibits and supplied testimony on the cost of gas plant used in the Company's interstate service. The Company claimed that cost, as of December 31, 1938, amounted to $69,735,638, the Staff indicated a figure of $51,984,153, while the books disclosed an investment of approximately $52,730,666.[7]

Hope's vouchers, books and records are adequate for examination, analysis and audit. Hope kept complete records of its expenditures throughout its existence, so no estimates are required to ascertain the actual cost.

Table A appearing on page 18 compares the cost of facilities used in interstate service as claimed by the Company, as shown by the books of account, and according to our findings, as of December 31, 1938.

**The Company's Estimated "Original Cost"**

The first step in the Company's determination was the taking of an inventory. The inventory units were then priced at estimated cost, including arbitrary overheads. The amounts shown as plant costs by the books were ignored, except for the purpose of aiding in estimating unit costs. As is shown by Table A, the Company's method resulted in a claimed net increase of $17,004,972 over the

---

[7] The book cost of the interstate facilities is derived as follows:

| | | |
|---|---|---|
| Total Plant Investment per books | | $56,213,454 |
| Less: | | |
| Distribution Property | $2,795,083 | |
| Unfinished Construction | 81,392 | |
| Intangible Plant | 30,186 | |
| Property Used to Transport Coke-oven Gas | 576,127 | 3,482,788 |
| Plant Investment, per books, of Interstate Facilities | | $52,730,666 |

amount recorded as investment in the interstate properties on its books of account. The Company claims, in other words, that its books fail to show the true cost of such properties in that amount. The items of that amount which are identifiable represent expenditures previously charged to expense accounts. Some of the alleged expenditures were not incurred at all. For example, claimed interest during construction of $632,000 was not actually paid. Obviously to the extent that the plant costs are understated, if they are, the difference must represent charges to other accounts, particularly expense accounts, in the books.

The claimed additional costs are divisible into two groups—one relating to properties constructed by the Company, and the other relating to property acquired from other utilities. Table B on page 19 shows the general nature of the $17,004,972.

# TABLE A

| Account | Cost of Plant as of December 31, 1938 | | |
|---|---|---|---|
| | Claimed by Company | Amt. Shown by Books* | Allowed |
| **Natural Gas Production Plant** | | | |
| Natural Gas Producing Lands | $ 2,370 | $ 3,320 | $ 3,320 |
| Natural Gas Producing Leaseholds | 1,684,636 | 1,331,101 | 1,595,005 |
| Rights of Way | 701,556 | 529,400 | 645,391 |
| Other Land and Land Rights | 22,126 | 24,602 | 21,008 |
| Field Measuring and Regulating Station Structures | 40,773 | 28,617 | 21,139 |
| Other Prod. System Structures | 291,872 | 213,164 | 191,189 |
| Gas Wells: Construction | 17,783,637 | 4,366,934 | 4,089,478 |
| Equipment | 8,168,192 | 7,885,581 | 7,610,510 |
| Field Lines: Construction | 4,056,915 | 3,028,847 | 3,622,489 |
| Equipment | 8,244,966 | 7,929,927 | 7,674,252 |
| Field Meas. and Reg. Station Equipment | 267,099 | 249,842 | 184,385 |
| Drilling and Cleaning Equipment | 604,936 | 543,740 | 595,693 |
| Other Production Equipment | 89,102 | 45,031 | 75,532 |
| Total Production Plant | 41,958,180 | 26,180,106 | 26,333,391 |
| **Transmission Plant** | | | |
| Land | 164,105 | 158,122 | 162,912 |
| Rights of Way | 442,394 | 491,784 | 391,243 |
| Compressor Station Structures | 1,725,945 | 1,661,573 | 1,441,882 |
| Trans. Meas. and Reg. Station Structures | 11,988 | 11,399 | 8,207 |
| Other Transmission System Structures | 11,509 | 7,348 | 6,776 |
| Mains | 15,180,596 | 14,413,516 | 14,132,075 |
| Compressor Station Equipment | 8,313,531 | 7,979,316 | 7,683,672 |
| Trans. System Meas. and Reg. Equipment | 26,713 | 29,463 | 17,616 |
| Other Transmission System Equip. | 23,042 | 15,188 | 21,016 |
| Total Transmission Plant | 25,899,823 | 24,767,709 | 23,865,399 |
| **General Plant** | | | |
| Land and Land Rights | 98,188 | 126,678 | 96,981 |
| Structures and Improvements | 247,427 | 237,323 | 225,888 |
| Office Furniture and Equipment | 195,911 | 239,989 | 178,683 |
| Transportation Equipment | 148,540 | 161,431 | 142,315 |
| Stores Equipment | 9,466 | 3,321 | 5,107 |
| Shop Equipment | 114,706 | 63,169 | 104,185 |
| Laboratory Equipment | 1,070 | 1,003 | 1,003 |
| Tools and Work Equipment | 4,634 | 200,761 | 4,545 |
| Communication Equipment | 347,639 | 249,121 | 248,976 |
| Miscellaneous Equipment | 1,172 | 20,484 | 1,148 |
| Total General Plant | 1,195,753 | 1,303,280 | 1,008,831 |
| Gas Plant for Interstate Service | 69,053,756 | 52,251,095 | 51,207,621 |
| Unoperated Acreage | 681,882 | 479,571 | 584,382 |
| Wells and Field Lines not in Service | ..... | ..... | 192,150 |
| Total Gas Plant (Exclusive of Distribution Plant and Property used to transport Coke-oven Gas) | $69,735,638 | $52,730,666 | $51,984,153 |

*For comparative purposes the amounts in this column have been classified (without change in the total) in accordance with our Uniform System of Accounts for Natural Gas Companies. The Company's study is on this basis also.

**TABLE B**

**Constructed Property**

| | |
|---|---|
| Inventory, Transfer and Correcting Adjustments | $(1,821,581)[8] |
| Direct Material and Labor Costs not Capitalized | 13,580,814 |
| Unloading, Hauling and Warehouse Handling Costs | 383,454 |
| Indirect Field Costs | 396,141 |
| Overhead Costs | 2,866,414 |
| Total Claimed Adjustments to Constructed Property | $15,405,242 |
| Claimed Adjustments to Properties Purchased from Other Utilities | 1,599,730 |
| Total | $17,004,972 |

The Company's cost study was made by an engineering firm. The witness for the Company, a valuation engineer, indicated clearly that he was not concerned with the Company's past practices in determining costs and in determining expenses. To him it was of no concern whether an item had been charged to expense and the cost thereof recouped in rates, or even whether an item represented an expense under the wide discretion of management allowed by accepted principles of accounting. The realities as to past practices and determinations received no consideration. Evidently the object of the study was to determine the maximum cost which could be assigned to the properties under any theory or principle of cost determination, regardless of the fact that the Hope Natural Gas Company had been in business more than forty years and had made determinations in its regular course of business as to which of its expenditures constituted investment in plant and which constituted operating expenses.

The first proposed adjustments to book cost ($1,821,581), reflecting inventory, transfer and correcting adjustments, will be discussed hereinafter.

[8] Parentheses indicate decrease.

The second adjustment ($13,580,814) represents items previously charged to expense and not capitalized in the books or items which cannot be identified in the books and records and, therefore, may not have been incurred at all. The amount of $13,580,814 may be subdivided as follows:

| | |
|---|---|
| Well Drilling | $11,279,554 |
| Other Direct Material and Labor Cost | 996,543 |
| Labor Costs in Laying Mains, Constructing Compressor Stations, etc., During Years 1918 to 1922, Inclusive | 1,295,953 |
| Leasehold Cost | 8,764 |
| Total | $13,580,814 |

The largest item of claimed additional cost relates to labor and drilling equipment used in drilling wells. The additional amount claimed ($11,279,554) is associated with 2,633 wells. It is the Company's contention that these expenditures, which were charged to operating expenses when incurred, should now be included in the rate base.

It was the consistent practice of the Hope Company up to 1923 to charge the cost of drilling wells to operating expense. This likewise was the general practice of the natural gas industry. It followed the well-established practice of extractive industries of charging items to expense which in less venturesome enterprises were ordinarily charged to the plant account.[9] The theory underlying the practice was that additional wells were constantly needed to keep the Company in business, hence the cost incurred was not for the purpose of adding to the property but rather for the purpose of maintaining the business. The evidence shows that the Natural Gas Association of America opposed a provision in the first uniform system of accounts for natural gas companies issued by a State

[9] *Re Hope Natural Gas Co.*, 1921 E 418, 439-440; *United States v. Roden Coal Co.*, 39 Fed. (2d) 425; *Marsh Fork Coal Co. v. Lucas*, 42 Fed. (2d) 83; *Commissioner of Internal Revenue v. Brier Hill Collieries*, 50 Fed. (2d) 777.

commission which required capitalization of well drilling expenditures. That Association took the view that such expenditures were necessary operating expenses. In fact, Hope did not change its practice in this respect until it was required to do so by the provisions of the system of accounts for natural gas companies promulgated by the Public Service Commission of West Virginia, effective in 1923. It is significant that West Virginia's system of accounts did not require and evidently did not permit the Hope Company to re-account for its past expenditures, but merely required a change as to treatment of well drilling expenditures beginning with its effective date.

The Company's practice of charging well drilling expenditures to operating expenses, therefore, conformed to the principles and practices of the time. One of the obvious purposes of keeping books of account is to inform management so that proper managerial decisions may be made. One of the first functions of management, of course, is to endeavor to fix prices so that revenues will cover operating expenses and yield a profit. Where it is the general practice of the industry to treat certain expenditures as operating expenses, it is manifest that such expenditures will be considered as expenses in its rate negotiations and determinations.

If there were any doubt about this matter, it would be dispelled by the action of the Hope Company itself. In 1921 the Hope Company was involved in a rate proceeding before the Public Service Commission of West Virginia. It was a proceeding in which Hope sought to increase its rates. In that proceeding the Company claimed well drilling and other expenditures now sought to be included in the rate base, as operating expenses. They were allowed as such by the Public Service Commission of West Virginia.[10] No further proof is needed to show that Hope

[10] *Re Hope Natural Gas Co.*, P. U. R. 1921 E 418, 433, 439-440.

considered the expenditures in question as operating rather than plant items, in its efforts to recover full operating costs plus a profit in the conduct of its business.

No greater injustice to consumers could be done than to allow items as operating expenses and at a later date include them in the rate base, thereby placing multiple charges upon the consumers.

The other direct material and labor costs of $996,543 appear, to the extent they can be identified, to have been charged in the past to maintenance and repairs.

The adjustments for cost of labor in laying mains, constructing compressor stations and other property totaling $1,295,953, and the adjustment of $8,764 to the cost of leases are treated later.

In addition to well drilling expenditures, other items now sought to be included in the plant accounts which were previously included in expenses, if they were incurred at all (the Company's method makes it impossible to determine whether or not certain of the expenditures were incurred) are as follows:

| | |
|---|---|
| Unloading, Hauling and Warehouse Handling Costs | $ 383,454 |
| Indirect Field Costs | 396,141 |
| Other Overhead Costs | 2,866,414 |

As to these items, here again the Company followed a consistent practice, and the practice of the industry, in charging such expenditures to expense accounts. It was not customary for the natural gas industry or other extractive industries to load the plant accounts with overhead items, such as shown above. Even under the relatively definite requirements of the Commission's present Uniform System of Accounts, considerable discretion and latitude are allowed management in accounting for overhead expenditures. Accordingly, the allowance of the items mentioned would not represent the correction of past

errors, but merely the substitution of present judgment for the judgment exercised at the time the expenditures were incurred, which covered a period of forty years. The important rule is that once discretion has been exercised, subsequent action must be consistent with the decisions previously reached. There is no settled principle controlling the determination of the exact amount of overheads, if any, which should be applied to the cost of plant items.

Besides claiming large additional costs for property constructed by the Company, Hope claims a net sum of $1,599,730 representing alleged additional original cost of property acquired from other utilities. These properties, acquired chiefly from affiliated utilities, were accounted for by Hope at the cost to it, which was the cost to the predecessors. Hope now claims that the costs accounted for as plant by the predecessors were in error in that the predecessors followed the same allegedly erroneous practices that Hope followed. It, therefore, claims that well drilling costs in the amount of $1,364,087, other direct material and labor costs of $286,173, unloading, hauling and warehouse handling costs of $18,557, indirect field costs of $38,519, other overhead costs of $122,043 and leasehold costs of $6,388, all of which, if incurred at all, the predecessors had charged to expense, should be added to its plant investment figure and included in the rate base.[11] Since these predecessor companies kept their books and records exactly as did Hope, in accordance with the general practice of the industry, the proposed adjustments, except for leasehold costs, are in the same category as the items which Hope now attempts to restate in its plant accounts.

In the course of its study, the Hope Company determined that considerable property which was recorded in its plant accounts, was no longer in existence. In other

[11] There were also inventory, transfer and correcting adjustments which decrease the book cost by $236,037, and they are discussed hereinafter.

words, there were unrecorded retirements. Offsetting the unrecorded retirements were certain items of existing property for which the Company found no costs in its plant accounts. More than likely, certain of the latter merely represented the failure to identify items which were determined to be unrecorded retirements. The net effect is a substantial adjustment ($1,821,581 for constructed property, and $232,930 and $3,107 for acquired property) for unrecorded retirements and miscellaneous corrections. The adjustment is not controverted and should be made.

**Impropriety of Including in Rate Base Items Previously Charged to Expense**

It has been shown that the Company's claim of additional plant cost over and above what is recorded on its books as plant investment represents largely expenditures previously charged to expense in accordance with the discretion of management. The Company, in other words, now impeaches its books and its former financial statements to regulatory bodies, tax authorities, investors, and others. It impeaches the decisions of management made at the time the expenditures were incurred. It does this in spite of the fact that its past decisions conformed to its own consistent practices, until required to change them by a regulatory agency, and to the general practice of the natural gas industry, as well as the extractive industry. The adjustments proposed, therefore, do not reflect the correction of errors in the past. Errors as to these items were not made.

The past determinations of the items constituting plant investment were deliberate, conscious acts on the part of management at the time of the transactions. A decision obviously must be made when an expenditure occurs as to whether it represents an investment in plant or an expense. There must also be some finality to these

decisions.[12] If they are treated as expenses at one time and as plant investment subsequently, chaos in rate-making and in corporate finance will prevail. It is no answer that many of the expenditures in question were incurred prior to the effective date of a prescribed uniform system of accounts. The Company kept plant and expense accounts throughout its history and conformed to the general business practices of the industry and like business institutions. It was evidently thoroughly convinced as to the propriety of its decisions, as witness its claim before the West Virginia Commission in 1921, that the very expenditures in question were operating expenses. The Company is now estopped from re-accounting for those expenditures.

With the decline in favor of the doctrine of "fair value" as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates. Immediately, however, we find an effort to tamper with these. There is in progress an attempt to make the reproduction cost *process* survive in the determination of actual cost of or investment in plant. Thus, in this case an inventory was taken and then units were priced at the estimated "actual cost." The method should be condemned at the threshold. For in addition to being permeated with conjectural estimates, it gives no heed to the realities of past events. Consistent treatment of expenses and plant investment costs is indispensable to the successful operation of the regulatory system.

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[12] Costs of exploration for and development of future gas reserves are considered current operating costs by the industry and Hope has included such costs in its current operating expenses. If retroactive accounting were allowed then the Company might restate these costs as capital investment in the future productive acreage. The Commission will allow $600,000 in annual operating expenses for exploration and development costs in fixing rates. If this item were permitted to be restated in plant cost ten years from now $6,000,000 would be added to the rate base resulting in multiple charges to consumers.

This is not to say that genuine errors in the investment accounts should not be corrected and the true figures given recognition in the rate base. Where real errors are made, they probably should be corrected. A distinction must be made, however, between genuine errors and a change in point of view, whereby past, deliberate decisions within the scope of an accepted principle are sought to be impeached to the pecuniary benefit of the Company.

The courts and commissions which have considered this matter have generally refused to include in the rate base amounts previously charged to expense in accordance with discretion of management. In the instant case, large parts of the claimed additions to book costs relate to well drilling expenditures and alleged overheads. The very question at issue has been passed upon twice by the Supreme Court of Appeals of West Virginia. In the first case in 1924, the Natural Gas Company of West Virginia sought to include such expenditures in the rate base after they had been charged to expense. The Public Service Commission of West Virginia refused to allow them. The Supreme Court of Appeals sustained the Commission.[13] The question was raised again in 1934 by the Natural Gas Company of West Virginia. The Public Service Commission of West Virginia then concluded that the inclusion of such expenditures in the rate base was required as a matter of law. The City of Wheeling, West Virginia, appealed the Commission's decision. The Court reversed the Commission and again held that items previously charged to operating expenses should not be included in the rate base.[14]

Thus, by far the weight of authority in court and commission decisions sustains the principle, sound in equity

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[13] *Natural Gas Company v. Public Service Commission*, 95 W. Va., 557, 121 S. E. 716, 720, P. U. R. 1924 D 346, 361.

[14] *Wheeling v. Natural Gas Company*, 115 W. Va. 149, 175 S. E. 339, 343-4, 5 P. U. R. (N. S.) 471, 479, app. dis. 296 U. S. 659.

and justice, that items previously charged to operating expenses under the allowable discretion of management should not later be included in the base on which customers are required to pay a return and depletion and depreciation allowances.[15]

The Hope Company's earnings over the years have been ample to provide for all operating expenses, including the $17,800,000 which it attempts to add to actual cost, an excessive reserve for depletion and depreciation, taxes, and large returns to investors. During the period 1898 to 1923 for which the Company seeks to re-account and expand its recorded plant costs by approximately $12,600,000 for well drilling costs alone, the average rate of earnings on the annual average invested capital (capital stock and surplus) was more than 15%:

**Actual Legitimate Cost Or Gross Plant Investment**

Accordingly, we begin with the book cost in the determination of the actual legitimate cost or investment in the facilities used in the Company's interstate business. We have already found that such book cost at the end of 1938 amounted to $52,730,666. There must be deducted from the book cost the unrecorded retirements, or inventory adjustments in the amount of $2,057,618. There is added to the book cost the amount of $15,152 ($8,764 for constructed property and $6,388 for acquired property) representing

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[15] *Re Los Angeles Gas & Electric Corp.*, P. U. R. 1931 A, 132, 143-4, aff. 58 Fed. (2d) 256, 261, 267, 289 U. S. 287; *Re Peoples Gas Light & Coke Co.*, 19 P. U. R. (N. S.) 177, 196-8, aff. 373 Ill. 31, 25 N. E. (2d) 482, 493, 31 P. U. R. (N. S.) 193, 207, app. dis. 309 U. S. 634; *Re West Virginia Central Gas Co.*, P. U. R. 1918 C, 453, 464-6; *Re Mondovi Telephone Co.*, P. U. R. 1933 B, 319, 321-3; See *Re Northwestern Electric Co.*, 36 P. U. R. (N. S.) 202, 208-213, aff. 125 Fed. (2d) 882; *Re Canadian River Gas Co., et al.*, F. P. C. Op. 73; cf. *Chicago & N. W. R. Co. v. Com'r. Int. Rev.*, 114 Fed. (2d) 882, 886, cert. den. 312 U. S. 692.

adjustments due to errors in stating the cost of leases, and an amount of $1,295,953, representing plant costs properly capitalized and then arbitrarily charged off to operating expenses.

There is considerable question as to whether the latter amount should be restored to book cost in determining the rate base. The amount arises as follows. From 1918 to 1923 Hope followed the peculiar practice of capitalizing the cost of direct labor incurred in laying pipe lines, constructing compressor stations and in installing equipment, but at the end of each year, arbitrarily charged off the amount thus capitalized during the year. This practice was peculiar to the Hope Company and was not a general practice of the industry. It did not conform to sound accounting principles. Hope followed the correct practice during all of its existence except for the few years mentioned. Under the circumstances, the amount is restored to the investment figure and is allowed in the rate base. The allowance in this instance, however, is not to be construed as a precedent.

As of December 31, 1938, the cost of unoperated acreage ($584,382) and the cost of certain wells and field lines ($192,150) then not in service were contained in the accounts. These items are eliminated from gas plant in service as of December 31, 1938, and appropriate adjustments for the use of such property and facilities are made subsequently.

After considering the evidence based upon the vouchers, books and records of the Company, and as a result of the application of fundamental principles of accounting, cost determination and equity, the Commission finds, in the words of Section 6(a) of the Act, the actual legitimate cost as of December 31, 1938 in plant used in the interstate business was $51,207,621, composed as follows:

| | |
|---|---|
| Book Cost 12/31/38 | $52,730,666 |
| Less Inventory adjustments (unrecorded retirements) | 2,057,618 |
| Less Wells and Field Lines Not in Service | 192,150 |
| Less Unoperated Acreage | 584,382 |
| Sub-total | 49,896,516 |
| Plus Correction to Cost of Leases | 15,152 |
| Plus Capitalized Costs Charged Off in Error | 1,295,953 |
| Actual Legitimate Cost of Plant in Interstate Service | $51,207,621 |

There were more retirements than additions in 1939, so the actual legitimate cost was $51,099,024 at the end of 1939. The record shows net additions of $965,533 in 1940 to produce a total actual legitimate cost of $52,064,557. Certain inactive wells with the connected field lines became active in 1940 and the cost of this property is $110,316. We find that the actual legitimate cost, including such currently used property, aggregates $52,174,873 as of December 31, 1940.

This actual legitimate cost is predicated upon facts and it is the best evidence in these proceedings, so we will employ it for determining the proper and allowable rate base.

**Depletion and Depreciation**

In determining the allowable rate base in these proceedings the actual existing depletion and depreciation should be deducted from the actual legitimate cost of the property devoted to the interstate service. See *Los Angeles Gas & Electric Corp. v. R. R. Comm.*, 289 U. S. 287, 312. Actual existing depletion and depreciation is the extent to which the service life, that is the economic life, of the property has been consumed due to such forces as exhaustion of the natural gas supply, wear, inadequacy, and

obsolescence.[16] Annual depletion and depreciation measure the economic service life consumed in one year, actual existing depletion and depreciation are the accrued consumption of the utility's economic service life on a certain date; the annual allowance for depletion and depreciation must, therefore, be correlated with the actual existing amount to avoid injustice to the utility or rate payer. *Re Canadian River Gas Co., et al.*, F. P. C. Op. 73; *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263, 275; *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 10.

The Company presented inconsistent claims in this respect. It alleged a relatively small amount of accrued or existing depletion and depreciation to be deducted in fixing the rate base, but claimed large annual amounts for future operating expenses.

The Company contends that the accrued depletion and depreciation in its property equaled approximately 35% of the reproduction cost at the end of 1938. We have weighed the estimate of reproduction cost and found it wanting. In addition, it is inequitable to predicate depletion and depreciation upon the delusive reproduction cost. The integrity of the investment will be maintained by basing depletion and depreciation upon actual legitimate cost and the Supreme Court has approved that method.[17]

The Company determined accrued depreciation primarily by the observation process and obtained what is called a "per cent condition" of the property. For annual expense purposes, it weighted the observed depreciation with retirement of property up to the date of the study. The fallacy of the "per cent condition" theory of accrued

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[16] *Lindheimer v. Illinois Bell Tel. Co.*, 292 U. S. 151, 167; *Re Canadian River Gas Co., et al.*, F. P. C. Op. 73; cf. *Depreciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 408, 422.

[17] *Lindheimer v. Illinois Bell Tel. Co.*; 292 U. S. 151, 167-9, 176; *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. . . . .

depreciation is plain here. To illustrate, under the hypothesis of the Company's witness, in determining the "per cent condition" of certain compressor station equipment, the property would be found to have depreciated only 25% throughout its life or be in 75 "per cent condition," and then suffer a precipitous loss in the brief final stage of service. Such a theory is opposed by reason and facts. *Los Angeles v. Southern California Telephone Co.*, 14 P. U. R. (N. S.) 252, 273-4. The Company's estimate of existing depreciation was based primarily upon a sporadic visual inspection of physical deterioration. Most of Hope's production and transmission property is not visible and the extent to which the service life has been consumed can not be determined from observation alone. Also, the functional causes of the retirement of property are given little consideration by the Company's visual method which samples physical causes. *Re Rochester Gas & Electric Corp.*, 33 P. U. R. (N. S.) 393, 468-490. The Commission concludes that the so-called accrued depletion and depreciation claimed by the Company does not give full or proper consideration to all factors contributing to the retirement of property, and that it does not reflect the actual existing depletion and depreciation or diminished service life of the property in service.

**The Required Reserve For Depletion and Depreciation**

The same factors that cause annual depletion and depreciation cause the actual existing depletion and depreciation to be deducted from the property in fixing the rate base. In our opinion, where reasonable and proper depletion and depreciation accounting practices have been observed by a natural gas company, the resulting reserve is the best measure of the depletion and depreciation existing in the property, i.e., the accumulated cost of property which has been consumed in service.

It is well known that many electric and gas utilities have not observed sound depreciation and depletion practices. The Hope Company is in this category. For many years most of Hope's business was not under regulation. Its practices as to depreciation and depletion, like the practices of many other utilities, were inconsistent and haphazard. Its book reserve does not measure the actual existing depreciation and depletion.

This Company has actually accumulated an excessive reserve. We are confronted, therefore, with the question as to whether that excessive reserve, or the reserve requirement (actual existing depreciation and depletion), should be deducted in determining the rate base.[18] We have formerly indicated that public utilities ought to set up proper depreciation (and depletion) expense and that the resulting reserve should be deducted from the gross cost in the rate base determination.[19] We reiterate that view.

We believe, however, that under such circumstances as exist in this case, where a large part of the Company's business is brought under regulation for the first time and where incorrect depreciation and depletion practices have prevailed, the best procedure is to deduct the reserve requirement in computing the rate base. This procedure will permit us to be consistent in those cases where utilities have deliberately failed to observe sound practices and as a result have deficient reserves. Thus, in the *Interstate Power Company* case, where the company had been negligent in accounting for depreciation and had a deficient reserve,

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[18] There are those who argue that excessive reserves should be deducted. *Pennsylvania Public Utility Comm. v. The Peoples Natural Gas Co.*, Nos. 11380, 12683 (1942) Buchanan, dissenting; See *Chesapeake & Potomac Tel. Co. v. Whitman*, 3 Fed. (2d) 938, 951-953; *New York Telephone Co. v. Prendergast*, 36 Fed. (2d) 54, 66.

[19] *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 10; *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263, 275.

we deducted the higher reserve requirement, as the measure of actual existing depreciation.

It should be borne in mind, however, that the deduction of the reserve requirement, rather than the actual book reserve, is for the purpose of getting a sound basis for future regulation and control of rates. Hereafter, the Company, in accordance with this Opinion and under our System of Accounts, is required to record proper depreciation and depletion expense. Hence, the books of this Company, as well as the books of others subject to our jurisdiction, after once having the reserve requirement determined, should reflect in substantial degree the proper depreciation and depletion. Use of the reserve requirement in this case will produce a proper starting figure so that the book reserve can be deducted hereafter as the proper measure of the actual depreciation and depletion. This treatment will then be consistent with the view that the book reserve is the proper deduction from the gross cost in determining the rate base.

It becomes necessary, therefore, to ascertain the best measure of the reserve requirement. The purpose of depletion and depreciation accounting is to offset diminution in service value[20] of property being used in service, and to determine as accurately as possible another element of the cost of service for a particular period. All of Hope's physical property, except certain land, will be depleted or depreciated completely when it reaches the end of its useful or economic life. Physical and functional forces, whether their effects are visible or not, are constantly reducing the service life of the Company's property. Service life is the equivalent of economic life or the utility of the property. Hope incurs plant costs to provide for future

[20] "Service value" is the difference between original cost and the net salvage value of gas plant. Depletion and depreciation signify the consumption of service life of property and when that is translated into dollars it shows the loss in service value.

service and to make production possible. As natural gas service is rendered, the economic value of property is gradually consumed, and the property is finally retired at the end of its service life. The cost of the property consumed annually in rendering that service should be charged to operating expenses to reflect the depletion and depreciation incurred.

The Commission's Staff presented a depletion and depreciation reserve requirement study in these proceedings. Estimates were made of the over all service lives of the properties by classes; those average service lives were converted into depreciation rates, and then applied to the cost of properties to determine the portion of the cost which had expired, that is, which related to the consumed service lives. The study covers the operations of the Company from its beginning in 1898 to December 31, 1940. It shows annual amounts for each group of property from the date installed to the date of retirement, and it concurrently provides the necessary reserves for property retired and for the ultimate retirement of existing property. The fundamental principle that annual expense for depletion and depreciation must be harmonized with accrued depletion and depreciation has been applied here. The straight-line service life method was used to compute the reserve requirement for all of the material, equipment and structures of the Company, and the unit-of-production method was applied to plant costs which are associated with the gas supply, i.e., gas producing lands and leases, field line and gas well construction, rights-of-way, and costs of abandoning gas wells.[21] The service life study was made by a properly qualified Staff engineer who analyzed Hope's past experience, including the retirement of property over the years. He gave consideration to relevant service life data on other pipe lines. He also considered the functional and physical aspects of depreciation. As an aid in the deter-

[21] As defined in the Uniform System of Accounts.

mination of service lives he made a field inspection of the Company's physical properties. The unit-of-production method used by the Staff was related to the gas reserves of the active wells of the Company. This case is free from the usual complexities involved in the estimate of gas reserves because the geologists for the Company and the Commission presented estimates of the remaining recoverable gas reserves which were about one per cent apart. The permeability and porosity characteristics of the region cause isolated pools of natural gas, and the Company's gas production properties are intermingled with non-productive areas and other companies' properties. This situation necessitated the segregation of Hope's property into gas producing areas for the depletion and depreciation reserve requirement study. Gas rights, well construction and connected field line construction costs are consumed in service proportionately with the depletion of the associated gas supply. Well equipment and field pipe line material are recovered and used again when the various sources of gas supply are exhausted. These facts of operation have been recognized in the ascertainment of the required reserve for depletion and depreciation.

The Staff recommended the depletion and depreciation reserve requirement for Hope's production, transmission and general plant in the amount of $23,520,561 as of December 31, 1940.[22] After a careful analysis of the evidence we have accepted certain adjustments advocated by the Company and find that the depreciation and depletion reserve should be not less than $22,328,016 as of December 31, 1940. These adjustments are as follows: (1) Due to

[22] That recommended required reserve is after a deduction of $1,162,710 for cost of abandoning property. The depreciation rates used in the reserve requirement study make proper provisions for the inevitable cost of abandoning property. But during the period 1898-1931 Hope charged the cost of abandoning property to maintenance expense, rather than to the depreciation reserve as a part of the net salvage.

the plant inventory adjustment made by the Company, as of December 31, 1938, and accepted by all parties, a net reduction in the plant accounts was made which represents property retired prior to December 31, 1938, but not so recorded on the books. The Company contends that 10 years is a fair approximation of the average period by which these retirements have been accumulating, hence the depreciation provisions should be reduced for the 10-year period. Had the retirements been made on the books as soon as the property was retired the depreciation base would be reduced and the annual provisions would be less. It is impossible to determine the actual dates the property was retired and we accept the 10-year period as a reasonable estimate of the average time from the date the property was retired to December 31, 1938. This adjustment results in a reduction of $31,106 in annual depreciation expense for each year and a reduction of $311,060 in the reserve requirement as of December 31, 1938. (2) In the case of lines lifted, Hope has usually retired labor cost and charged it to the depreciation reserve. But in the case of pipe retired in connection with a replacement the original labor was not always retired and the renewal labor was charged to operating expense. The depreciation rates applied by the Staff include provisions for the retirement of all labor and materials, hence its reserve requirement computation includes accruals for construction labor cost on the main pipe lines which has been retired and not charged to the depreciation reserve. The Company has estimated an amount of $272,693 representing the additional retirements of labor cost which we will allow as a reduction in the reserve requirement. (3) The group depreciation rate of 2.5% employed by the Staff in its study should be reduced to 2.22% for gas well equipment. As revised the rate for gas well material is the same as for field line

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[23] Total provisions from 1898 to 1938, inclusive, amount to $5,060,456 at a 2.5% depreciation rate and $4,493,685 at a 2.22% depreciation rate for gas well equipment.

material, although the evidence indicates that a somewhat shorter average life has been experienced for gas well material than for field line material. At the rate of 2.22% the annual depreciation expense will be reduced $21,110 for 1939 and $20,911 for 1940. Consistent with the reduction in the annual depreciation expense the reserve requirement at the end of 1938, 1939 and 1940 will be reduced $566,771, $587,881, and $608,792, respectively.

The first two of the above-mentioned adjustments are the result of certain accounting practices of Hope prior to December 31, 1938 and do not affect depreciation expense for the years subsequent to that date. The reserve requirement which the Commission finds to be reasonable and proper is summarized as follows:

**Depletion and Depreciation Reserve Requirement**

| | Dec. 31, 1938 | Dec. 31, 1939 | Dec. 31, 1940 |
|---|---|---|---|
| Amount Computed by Staff | $23,501,356 | $24,072,167 | $24,683,271 |
| Less Staff Adjustment for Cost of Abandoning Property | 1,162,710 | 1,162,710 | 1,162,710 |
| Amount Recommended by Staff | 22,338,646 | 22,909,457 | 23,520,561 |
| Less: Unrecorded Retirements | 311,060 | 311,060 | 311,060 |
| Unretired Labor on Transmission Line Replacements | 272,693 | 272,693 | 272,693 |
| Change in Depreciation Rate for Gas Well Equipment | 566,771 | 587,881 | 608,792 |
| Total Adjustments | 1,150,524 | 1,171,634 | 1,192,545 |
| Required Depreciation and Depletion Reserve | $21,188,122 | $21,737,823 | $22,328,016 |

The required depletion and depreciation reserve, as we have determined it upon the record, is the best evidence of the measure of actual existing depletion and depreciation, and it will be deducted from the actual legitimate cost of the Company's property for rate-making.[24] The reserve re-

[24] See *Re Long Island Lighting Co.*, 18 P. U. R. (N. S.) 65, 146-151, 189-191; aff. 249 App. Div. 918, 292 N. Y. S. 807, 809, 18 P. U. R. (N. S.) 225, 226; *Re Rochester Gas & Electric Corp.*, 33 P. U. R. (N. S.) 393, 489, 502-3; National Association of Railroad and Utilities Commissioners, Proceedings of Fiftieth Annual Convention (1938) pp. 473-4.

quirement on any selected date is the total of the annual provisions for depletion and depreciation less the actual retirements of property. The method used here determines the amount required annually to reimburse the Company for property consumed in service, and it results in a correlation of the annual expense and the accumulated reserve. The method is just and consistent for each operating period because the costs utilized are matched with the revenues produced by the property in service.

As we have noted, the Company has built up an excessive reserve by charging large annual allowances for depletion and depreciation to operating expenses in the past.

The book reserve for interstate plant at the end of 1938 amounted to about $39,000,000 which is $18,000,000 in excess of the amount we determined as the reserve requirement. In addition, twice in the past the Company has transferred amounts aggregating $7,500,000 from the depreciation and depletion reserve to surplus. When these latter adjustments are taken into account, the excess becomes $25,500,000, which has been exacted from the rate payers over and above the amount required to cover the consumption of property in the service rendered and thus to keep the investment unimpaired. *Lindheimer v. Illinois Bell Tel. Co.*, 292 U. S. 151, 169, 174.

**Estimated Additional Fixed Capital Expenditures.**

To make the rate base figures current, the Company presented an estimate of $8,956,500 in "capital expenditures" which it planned for production, transmission and general plant during 1941, 1942 and 1943. Obviously these proposed gross additions should increase the allowable rate base only to the extent that net actual legitimate cost will be increased. Also, $1,270,000 was estimated for 1943 additions to meet the demands of new or increased business. The Commission has not given direct effect to those ex-

pected 1943 additional revenues in the forecast of revenues for rate-making, so that $1,270,000 will not be included in the rate base. The determination of the estimated increase in net plant cost requires the consideration of additions and retirements of plant and the effect on the depletion and depreciation reserve of future accruals and retirements. Giving due weight to all these factors the increased net actual legitimate cost, averaged for the period 1941-1943, is $1,392,021.[25]

The Company presented a general plan which it has for the construction of a pipe line from West Virginia to Louisiana to supplement its present source of supply of gas and to meet predictable increased demands for natural gas. Due mainly to the shortage of materials caused by this war, the status of that proposed line is so uncertain that it need not be considered in these proceedings. When the proposed line is constructed and definite information is presented concerning its effect on the rate base and net income, the Commission will give the matter timely and appropriate consideration.

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[25]

| | | |
|---|---|---|
| Estimated Fixed Capital Expenditures 1941-1943 | | $8,956,500 |
| Less: Expenditures in Expectation of New or Increased Business | $1,270,000 | |
| Gross Property Retirements | 2,700,000 | 3,970,000 |
| Estimated Net Change in Plant | | 4,986,500 |
| Deduct: Estimated Net Change in Depletion and Depreciation Reserve—Depletion and Depreciation Accruals 1941, 1942, 1943 | 4,362,500 | |
| Less: Retirement Losses Chargeable against Reserve | 2,160,042 | 2,202,458 |
| Estimated Increase in Net Actual Legitimate Cost | | $2,784,042 |
| Average for the period ($2,784,042 ÷ 2) | | $1,392,021 |

**Other Used and Useful Property**

The Company's geologist grouped the unoperated acreage[26] into three classes: (1) protective acreage within a mile of producing wells comprised 64%; (2) prospective acreage for shallow-sand production within three miles of producing wells comprised 14%; and (3) prospective acreage for deep-sand production within three miles of producing wells comprised the remaining 22%. The total unoperated acreage as of December 31, 1940, was 539,285 acres. The Company has undertaken an extensive drilling program, including deep-test wells, and it is a reasonable expectation that within a few years nearly all of this unoperated acreage will become productive, or will be proved unproductive and cancelled. There is no evidence that Hope has acquired large blocks of unoperated acreage to obtain a monopoly on the source of supply, and there is evidence that all of its unoperated acreage is necessary and useful, or imminently useful, in rendering gas service. The cost of unoperated acreage will be included in the rate base. The Commission finds that the actual legitimate cost of unoperated acreage was $584,382 as of December 31, 1938, $567,152 for the end of 1939, and $566,105 as of December 31, 1940.

**Materials and Supplies Plus Cash Working Capital**

There is no controversy over the amount of materials and supplies required by the Company. The monthly average of materials and supplies on hand is the most accurate measure of the Company's requirements. The Commission finds that $1,228,599 is the necessary average amount for materials and supplies in 1939, 1940 and the future. This is sufficient, on the average, to meet requirements for more than a year.

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[26] Operated gas acreage is any acreage that is being drained by producing gas wells and all other acreage is considered as unoperated. Hope has held less than two unoperated acres to one operated acre during the last ten years.

A witness for the Company used a period of 45 days as the lag in the receipt of revenues. He stated that 45 days of operating expenses, including gas purchased, would measure the cash working capital required by the Company on a practical operating basis and he computed the amount to be $1,754,008.

A period of 45 days is ample to measure the amount of cash required for payment of operating expenses. Cost of gas purchased must be excluded from the computation because revenues from gas sales are received before the payment for purchased gas is due. The Company has approximately $500,000 on hand at all times representing taxes which are not paid until many months after they are accrued and these tax funds are available for bank balances and working capital requirements. The Commission will allow cash working capital in the amount of $871,401 for 1939 and $896,401 for 1940. This is the maximum allowable amount computed on 45 days of operating expenses, excluding cost of gas purchased, and allowing prepaid expenses in full.

The Commission finds that $2,100,000 was required for materials and supplies and cash working capital in 1939, and that $2,125,000 was necessary for 1940 and will be adequate for the future.

**Conclusions With Respect to the Rate Base**

There is a further matter with respect to plant investment which the Commission will consider before making the final determination of the rate base. Prior to January 1, 1939, the Company charged all administrative and general costs to operating expense. Beginning January 1, 1939, the Company tentatively adopted the practice of capitalizing a portion of its administrative and general expenses. This discretion by the management is permissible under the Commission's Uniform System of Accounts. This tentative capitalization of administrative and general expenses was

reconsidered by the Company and it has informed the Commission that it wishes to resume the regular practice of including all general and administrative costs in operating expenses. This change in the tentative accounting policy is reflected in the verified annual report for 1941 filed with this Commission. The amounts of $79,439 for 1939 and $138,018 for 1940 are removed from plant costs and included in operating expense for the respective years. Theoretically, adjustments to annual depreciation expense and to the reserve requirement should be made on account of the foregoing, but the amounts are so insignificant in a case of this magnitude that no inequity will result from not making them.

The analysis of the evidence which we have discussed with respect to the components of the rate base and our conclusions may be summarized thus:

| | Dec. 31, 1938 | Dec. 31, 1939 | Dec. 31, 1940 | Future |
|---|---|---|---|---|
| Gross Investment in Gas Plant in Service (Exclusive of Distribution Plant, and Property Used to Transport Coke-oven Gas) | $51,207,621 | $51,019,585 | $51,957,416 | $51,957,4 |
| Less: Actual Existing Depletion and Depreciation | 21,188,122 | 21,737,823 | 22,328,016 | 22,328,0 |
| Net Investment | 30,019,499 | 29,281,762 | 29,629,400 | 29,629,4 |
| Add: Net Capital Additions 1941, 1942, 1943 | | | | 1,392,0 |
| Useful Unoperated Acreage | 584,382 | 567,152 | 566,105 | 566,1 |
| Working Capital | 2,100,000 | 2,100,000 | 2,125,000 | 2,125,0 |
| Interstate Rate Base | $32,703,881 | $31,948,914 | $32,320,505 | $33,712,5 |

The Commission, therefore, adopts the foregoing amounts as the interstate rate base for the dates indicated, for the Company's property assembled as a whole and doing business as part of an integrated system. The Commission finds that the rate base for 1939 was the average of the rate base amounts at the beginning and the end of that year or $32,326,398, that the rate base for 1940 was the average of the rate base amounts at the beginning and the end of that year or $32,134,710, and that the rate base for fixing future rates is $33,712,526.

## OPERATING REVENUES AND EXPENSES

For rate-making purposes the Commission has given consideration to the actual operating revenues and expenses of the Company for 1937-1940, inclusive, and has also considered the income statements since 1898. In testing the reasonableness of existing rates the latest experience of the Company, as disclosed by the record, is the closest reflection of the present and future operations.

### Interstate Gas Service Revenues

There is no controversy over the volume of gas sold or the revenues received by Hope. The Commission finds that during the years 1939 and 1940 the interstate gas sales to the five customer companies were as follows:

| | 1939 | | 1940 | |
|---|---|---|---|---|
| | M.c.f. billed | Revenues | M.c.f. billed | Revenues |
| Ohio Gas Company | 33,907,672 | $12,359,500 | 40,376,091 | $14,726,736 |
| Natural Gas Company | 3,864,104 | 1,371,757 | 9,738,612 | 3,457,207 |
| Gas Company | 237,640 | 83,174 | 388,750 | 136,063 |
| tte County Gas Company | 840,398 | 264,725 | 859,106 | 270,618 |
| facturers Light and Heat mpany | 2,500,755 | 787,738 | 2,241,684 | 706,131 |
| | 41,350,569 | $14,866,894 | 53,604,243 | $19,296,755 |

### Interstate Operating Expenses

The Commission has considered the Company's operating expenses as recorded on its books, as claimed for rate-case purposes, and as recommended by the Staff. The subsequently discussed adjustments to the Company's operating expenses are made to the amounts as actually recorded on its books for the years 1939 and 1940.

### Depletion and Depreciation Expenses

The annual allowance for depletion and depreciation included in operating expenses is determined by the same rates and methods used to determine the depletion and depreciation actually existing in plant.

The Commission finds that $392,500 for 1939 and $624,440 for 1940 is the proper allowance for depletion expense. The present and prospective demands upon the production system indicate that production for the year 1940 is the proper guide for future depletion expense and we will allow $624,440 as the average cost of depletion in our determination of the cost of service. (Depletion expense is computed on the unit-of-production, hence it varies with the actual production of gas.)

The record shows that Hope Company's annual depreciation expense has remained relatively stable, the proper amounts for 1939 and 1940 being as follows:[37]

| | 1939 | 1940 |
|---|---|---|
| Production Plant | $351,811 | $349,676 |
| Transmission Plant | 460,267 | 460,245 |
| General Plant | 25,725 | 25,676 |
| Total Depreciation Expense | $837,803 | $835,597 |

The Commission finds that the annual depletion and depreciation allowance required for future operating expenses is $1,460,037.

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[37] Determined by applying the following straight-line depreciation rates to the average depreciable investment for the year:

| | Rate |
|---|---|
| *Production Plant:* | |
| Structures | 4.17% |
| Field Line Material, Meas. & Reg. Station Equipment | 2.22% |
| Gas Well Equipment | 2.22% |
| *Transmission Plant:* | |
| Main Lines, Rights-of-Way and Meas. & Reg. Station Equipment | 1.56% |
| Structures | 2.50% |
| Compressor Station Equipment | 2.56% |
| *General Plant:* | |
| Structures | 2.17% |
| Office Furniture & Equip. | 4.00% |
| Other Equipment | 3.57% |
| Communication Equipment | 3.85% |

**Exploration and Development Costs**

Section 14(b) of the Natural Gas Act authorizes the Commission to determine the "propriety and reasonableness of the inclusion in operating expenses, capital, or surplus of all delay rentals or other forms of rental or compensation for unoperated lands and leases." Delay rentals paid periodically on natural gas lands to reserve the gas rights for a future supply of gas are included in exploration and development costs. The other costs included are those associated with the drilling of non-productive wells, the abandonment of non-productive leases and the abandonment of projects on which preliminary expenditures were made to determine the gas prospects of available acreage.

The Hope Company, like other companies in the natural gas industry, has followed the conservative practice of charging all exploration and development costs to operating expenses. Exploration and development costs are necessary to replenish the Company's gas supply in order to maintain continued gas service. The Commission has included Hope's gas producing acreage and its useful unoperated acreage at cost in the rate base. The annual depletion allowance is based upon the actual legitimate cost of gas producing leases so there is no margin in that annual allowance to cover exploration and development costs. In fairness to the investors and the rate payers the Commission will make an allowance for delay rentals related to the unoperated acreage and the other exploration and development costs in operating expenses. Hope incorrectly stated the cost of abandoned and surrendered leases in 1939 and 1940 and we find that the cost of leases abandoned should be included in exploration and development costs in the respective amounts of $45,164 for 1939 and $12,422 for 1940. The Company's exploration and development costs were $500,344 in 1939 and $407,920 in 1940. In view of the Company's extensive program for drilling

wells in the next few years and its recent experience with respect to exploration and development costs, the Commission finds that the proper and reasonable future annual allowance for such costs is $600,000 for rate-making purposes.

**Reclassification and Rate Case Expenses**

The Hope Company presented evidence to show that it has spent $675,000 in making reclassification studies in order to comply with the recent Systems of Accounts prescribed by the West Virginia Commission and the Federal Power Commission. The Company also showed expenditures totaling $825,000 as its expenses in this rate case. A contention is made by the Company that it should be allowed an interest rate of 8% on the "unamortized balance" of its reclassification and rate case expenses. In fact, however, the Company has charged all these costs to operating expenses as they were incurred during the years 1938-1941 and the rate payers have already paid enough to reimburse the Company. The Company's interstate wholesale rates have been excessive for several years and the unusually large amount of rate case expenses would ordinarily prompt the Commission to disallow any such expenses to be amortized in the future under the rates the Commission will prescribe because it results in a duplication of charges. But in view of the Supreme Court's statement that even where rates in effect are excessive the utility should be allowed its reasonable expenses for presenting its side to the Commission, the Commission concludes that the rate case expenses and the reclassification expenses, totaling $1,500,000 should be spread over a 10-year period beginning January 1, 1939, by the inclusion of $150,000 annually in operating expenses.[28] The Company has charged rate case and property reclassification

[28] *Driscoll v. Edison Light & Power Co.*, 307 U. S. 104, 120-121.

expenses to operating expenses as incurred in the amounts of $543,121 for 1939 and $624,041 for 1940. Those amounts will be eliminated from operating expenses for rate-making, and the allowance of $150,000 annually for ten years will be made instead.

**Affiliate's Excess Profits From Processing Hope Company's Gas**

Hope Construction & Refining Company, an affiliate, extracts gasoline and other by-products from the natural gas of Hope Natural Gas Company. The extraction of gasoline and butane is profitable and is necessary to make the natural gas marketable and transportable. The process of extracting gasoline and butane reduces the heating value of the natural gas and consumes a certain volume of Hope's natural gas, thus imposing a burden upon the gas business.[29] Much of the gasoline extracted from Hope's natural gas has been sold to the Standard Oil Company at about one-half the price received from sales to others. It is significant that the Hope Natural Gas Company processed its own gas before 1920. The natural gas customers are entitled to be credited with a share of the profit from the processing of Hope's gas, even as they would pay the deficit if that essential processing were not profitable. It is agreed that it is proper to make a credit for a portion of the profits realized by Hope Construction & Refining Company from the processing of Hope's gas, but there is a dispute over the amount of the credit. The Commission concludes that the credit proposed by the Company, being a royalty of ¼ of the gross earnings from the gasoline and butane extracted, is not supported by sufficient evidence. The excess profits of the affiliated company above the cost of processing Hope's gas and a fair rate of return on its investment is the proper credit to Hope Natural Gas

[29] *Re Hope Natural Gas Co.*, P. U. R. 1921E 418, 428-430.

Company. See *United Fuel Gas Co. v. Comm'n*, 278 U. S. 300, 319-321; *Dayton Power & Light Co. v. Comm'n*, 292 U. S. 290, 295. The cost of processing Hope's gas includes all of the affiliated company's related operating expenses, including depreciation expense, taxes, and a liberal 6½% rate of return on the net investment, plus working capital, devoted to the processing function. The affiliated company's extraction plants are usually located near Hope's compressor stations. The Commission finds that Hope should have received payments of $117,641 in 1939 and $119,592 in 1940 for the steam and boiler fuel which it furnished its affiliate at the extraction plants, and that the gas vapors which are returned to Hope after processing belong to Hope as part of its natural gas. From the record we find that Hope Construction & Refining Company had the following average net investment and required working capital devoted to processing Hope's natural gas:

| | 1939 | 1940 |
|---|---|---|
| Gross Investment | $1,716,145 | $1,696,510 |
| Depreciation Reserve Requirement | 1,208,739 | 1,260,312 |
| Net Investment | 507,406 | 436,198 |
| Working Capital | 80,000 | 80,000 |
| Average Net Investment | $ 587,406 | $ 516,198 |

The Commission finds that Hope's affiliate has earnings from the processing of gas in excess of a fair return and that these excess profits are applicable as reductions of Hope's operating expenses. For 1939 and 1940 these excess profits are determined as follows:

| | 1939 | 1940 |
|---|---|---|
| Gasoline and Butane Revenues | $791,451 | $770,028 |
| Related Operating Expenses | 518,394 | 551,370 |
| Net Processing Income | 273,057 | 218,658 |
| Return at 6½% on Net Investment Plus Working Capital | 38,181 | 33,553 |
| Excess Profits | $234,876 | $185,105 |

In prescribing future rates the affiliate's excess profits for 1940 will be employed as a conservative measure of Hope's portion of the profits from the gasoline and butane extracted from its gas.

**Other Adjustments to Operating Expenses**

Hope furnishes management services to several affiliated companies at cost, and credits the proceeds to miscellaneous gas revenues thereby permitting the cost of those services to others to remain in its operating expenses. The Commission, therefore, finds that operating expenses should be reduced $192,415 for 1939 and $109,194 for 1940 for the cost of services billed to others in order to reflect actual net operating expenses.

Hope furnishes natural gas to Hope Construction & Refining Company for use in repressuring oil wells. The gas is returned to Hope's system at reduced pressures. An amount of 2½¢ per m.c.f. is regarded as the cost of recompressing the natural gas returned to the Hope Company. Hope records these transactions as sales and purchases of natural gas and that practice overstates both revenues and expenses. The Commission finds that operating expenses and revenues should be reduced $72,388 for 1939 and $73,644 for 1940 to eliminate duplication of cost in production and transmission expenses.

The Company has eliminated the property and expenses relating to the transportation of coke-oven gas used as fuel at its Hastings Compressor Station and in its figures has substituted the cost of an equivalent amount of natural gas priced at 22¢ per m.c.f. The Commission agrees with the Company and finds that $295,158 for 1939 and $333,036 for 1940 should be eliminated from operating expenses, and that $107,758 for 1939 and $126,000 for 1940 should be included in operating expenses to reflect the equivalent cost of natural gas for the quantity of coke-oven gas used as fuel in the Hastings Station.

Hope furnishes steam from its compressor stations without charge to Hope Construction & Refining Company

for use in the extraction plants, with the exception of the steam furnished from Goff Compressor Station, and does not record this transaction on its books. The necessary adjustment for this free steam has been made by the Commission. The Company credits revenue instead of expenses with the value of steam furnished by its Goff Station, thereby overstating both gas service revenues and the cost of compressing natural gas. The Commission, therefore, finds that operating expenses should be reduced $4,404 for 1939 and $6,000 for 1940 to state the actual cost of operation.

Hope bills the Peoples Natural Gas Company at the rate of 38.5¢ per m.c.f. for the natural gas sold and includes the gross amount of the billings in revenues. The Peoples Company must compress that gas to transport it to market, so Hope refunds 3¢ per m.c.f. to Peoples under the provision of the sales contract and includes this amount in its operating expenses as a cost of compressing gas. This accounting practice followed by Hope overstates the actual revenues and overstates the actual operating expenses. The Commission finds that the cost of compressing gas has been stated incorrectly and that operating expenses should be reduced $115,923 for 1939 and $292,158 for 1940.

Certain donations were included by the Company in Administrative and General Expenses. The Commission finds that donations amounting to $5,183 for 1939 and $3,496 for 1940 are not allowable costs for purposes of rate-making and should be deducted from operating expenses.

The Company has included $10,926 for the settlement of a claim for damages and $16,318 to meet a deficiency in its insurance plan for employees in general expenses for the year 1939. These expenses are applicable to prior years' operations and therefore not allowable for 1939.

Hope recorded the salvage received from an experimental liquefying gas plant as revenues in the amount of $23,896. That amount should have been applied as a

reduction of the cost of the experiment, which cost was charged to 1940 operating expenses. Therefore, the Commission finds that 1940 operating expenses should be reduced $23,896.

**State and Miscellaneous Federal Taxes**

The Company has included in taxes for the years 1939 and 1940 certain amounts which should not have been included, and has failed to include certain other amounts which should have been included. The following table shows the amounts:

| Taxes Not Applicable | 1939 | 1940 |
|---|---|---|
| Taxes applicable to prior years | $23,349 | $17,099 |
| W. Va. taxes billed others | 10,768 | 41,334 |
| Taxes not applicable to gas operations | 2,741 | 3,218 |
| | 36,858 | 61,651 |
| **Taxes Applicable** | | |
| Underaccrual of taxes | 16,548 | 313 |
| Net Tax Adjustment | $20,310 | $61,338 |

The Company has over-accrued Federal Income taxes on its books and the Commission has made a deduction of $33,479 for 1939 and $16,480 for 1940 to reflect the taxes actually paid which were $191,521 for 1939 and tentatively reported to be $912,313 for 1940.

**Specific Distribution Expenses**

The Commission finds that certain amounts included in depreciation, administrative and general expenses, and taxes are specific distribution costs, as follows:

| | 1939 | 1940 |
|---|---|---|
| Depreciation | $ 82,000 | $ 89,345 |
| Taxes | 126,981 | 141,640 |
| Administrative and General | 17,237 | 13,231 |
| Total | $226,218 | $244,216 |

## Operating Expenses Summary

The total of the Commission's adjustments to operating expenses per books results in a reduction of $1,186,002 for the year 1939 and a reduction of $1,199,958 for the year 1940, and they are summarized as follows:

| | 1939 | 1940 |
|---|---|---|
| **Decreases in Operating Expenses:** | | |
| Excess Profits on Gasoline and Butane | $ 234,876 | $ 185,103 |
| Steam Furnished H. C. & R. Co. | 117,640 | 119,592 |
| " " " —Goff Station | 4,404 | 6,000 |
| Refund to the Peoples Nat. Gas Co. for compressing gas | 115,923 | 292,158 |
| Gas used in repressuring oil wells | 72,388 | 73,644 |
| Management Fees and Expenses | 192,415 | 109,194 |
| Excess Cost of Coke-oven gas | 187,400 | 207,036 |
| Donations | 5,183 | 3,496 |
| Salvage from Liquefying Gas Experiment | — | 23,896 |
| Taxes | 20,310 | 61,338 |
| Income Tax | 33,479 | 16,480 |
| Reclassification and Rate Case Expenses | 543,121 | 624,041 |
| Expenses applicable to Reserve Gas Co. | 125 | — |
| Expenses applicable to prior years | 27,244 | — |
| Total Decreases | 1,554,508 | 1,721,978 |

| | 1939 | 1940 |
|---|---|---|
| **Increases in Operating Expenses:** | | |
| Abandoned Leases | $ 45,164 | $ 12,422 |
| Adm. & General Expenses Capitalized in error | 79,439 | 138,018 |
| Depletion and Depreciation | 93,903 | 221,580 |
| Reclassification and Rate Case Expenses | 150,000 | 150,000 |
| Total Increases | 368,506 | 522,020 |
| Total Adjustments | $1,186,002 | $1,199,958 |

The functional classification of operating expenses per books and after the application of the foregoing adjustments follows:

| Operating Expenses | 1939 | | 1940 | |
|---|---|---|---|---|
| | Per Books | Allowed | Per Books | Allowed |
| ıte Operating Expenses: | | | | |
| d Gas Production | $ 1,439,971 | $ 1,186,578 | $ 1,427,594 | $ 1,227,930 |
| Purchased | 7,746,854 | 7,675,105 | 8,605,981 | 8,533,779 |
| ission Expenses | 1,906,993 | 1,481,833 | 2,437,381 | 1,818,335 |
| nistrative and General Ex | | | | |
| se | 1,393,844 | 1,069,090 | 1,653,623 | 1,187,376 |
| tion | 18,400 | 1,092,500 | 18,284 | 624,440 |
| ıpairs | 1,200,008 | 867,803 | 1,209,418 | 845,597 |
| ization (other) | 6,369 | 6,369 | 5,996 | 5,996 |
| ration and Development | | | | |
| ts | 435,179 | 360,351 | 395,498 | 407,920 |
| d State and Misc. Federal | 1,211,732 | 1,053,117 | 1,348,995 | 1,133,562 |
| al Income Tax (before tax | | | | |
| ts) | 227,000 | 196,521 | 928,596 | 912,313 |
| al Interstate | 15,804,312 | 14,904,266 | 18,130,873 | 16,897,569 |
| Distribution Expenses: | | | | |
| ration | 201,029 | 201,029 | 215,128 | 215,128 |
| ers' Acctg., Coll. and | | | | |
| Exp. | 160,180 | 254,187 | 161,917 | 160,908 |
| nistrative and General | | 17,237 | | 13,231 |
| reciation | | 2,000 | | 80,213 |
| | | 226,981 | | 141,040 |
| al Distribution | 368,109 | 702,434 | 377,045 | 610,252 |
| Total Operating Expenses | $16,172,421 | $15,606,419 | $18,507,918 | $17,507,760 |

## Future Operating Expenses

The operating expenses as determined for the purpose of estimating the future cost of interstate service are based primarily on the actual operating cost for the year 1940, the latest available data in the records. That year reflects an increase of $2,300,000 over the operating expenses of 1939 and is the best guide to present and future costs.

The Commission finds that the following adjustments of 1940 costs are reasonable and proper for the purpose of estimating future operating expenses for rate fixing:

| | | |
|---|---|---|
| Increase in wages not reflected in 1940 operating costs | | $202,172 |
| Increase in West Virginia property taxes not reflected in 1940 operating costs | | 81,751 |
| Decrease due to the following non-recurring costs which were included in administrative and general expenses for 1940: | | |
| Cost of moving Company office from Pittsburgh, Pa. to Clarksburg, W. Va. | $41,750 | |
| Experimental liquefying gas plant | 8,492 | |
| Pennsylvania State income tax | 4,601 | |
| Decrease | | 54,843 |
| Increase in Exploration and Development costs to allow an average amount of $600,000 annually in the future costs | | 192,080 |
| Total net increase over 1940 operating expenses | | $421,160 |

**Federal Income Tax**

In accord with practice, Hope's income tax return for 1940 was prepared on a tentative basis. The evidence in the record shows that the net taxable income was approximately $3,801,304 for 1940 and was $1,160,733 for 1939, that the tax rate was 24% for 1940 and 16.5% for 1939, and that the income tax was approximately $912,313 for 1940 and was $191,524 for 1939.

The Company does not report operating revenue deductions for tax purposes the same as it records them on its books.[39] Adjustments for rate-making and accounting purposes do not affect operating expenses for tax purposes, because that amount is determined by the administration of the federal Revenue Acts. The complete effect of all Commission adjustments is shown by any increase or decrease in revenues which results from a rate order. In order to determine a reasonable allowance for income taxes it is

[39] The net income per books in 1940 was $5,234,175 after book income taxes of $928,793 or $6,162,968 before income taxes. The net taxable income for that year was $3,801,304 showing that Hope claimed $2,361,664 for tax deductions not reflected in operating expenses on its books.

necessary only to apply the proper tax rate to the net taxable income applicable to the test year and to give effect to any tax saving or increase by reason of a change in revenue due to a rate order.

A combined normal and surtax rate of 40% is being discussed in Congress. We will use that rate for the purpose of computing the future income tax allowance. Based on 1940 net taxable income of $3,801,304 the income tax would be $1,520,522 at a 40% tax rate.

Each dollar of the indicated reduction in gross revenues will result in a reduction of forty cents in income taxes. The following computation shows the indicated reduction in rates and the amount of income taxes by applying the rate of return found to be fair and which is discussed in the subsequent section:

| | Before Income Tax Saving | After Income Tax Saving |
|---|---|---|
| Operating Revenues from Interstate Sales | $19,296,755 | $15,686,898 |
| Deductions: | | |
| Interstate Operating Expenses (Excluding income taxes) | 16,196,355 | 16,196,355 |
| Other Gas Revenues | ( 83,275) | ( 83,275) |
| Allocation of costs to local West Va. Sales[31] | ( 2,694,075) | ( 2,694,075) |
| Federal Income Tax at 40% | 1,520,522 | 76,579 |
| Net Operating Revenue from Interstate Sales | $ 4,357,228 | $ 2,191,314 |
| Return at 6½% on Interstate Rate Base of $33,712,526 | 2,191,314 | |
| Excess Earnings before Income Tax Saving | 2,165,914 | |
| Income Tax Saving | 1,443,943 | |
| Excess Earnings after Income Tax Saving | $ 3,609,857 | |

[31] Computed as follows:

| | | |
|---|---|---|
| West Virginia Operating Revenues | | $3,435,675 |
| Specific Distribution Expenses | $ 620,252 | |
| Return at 6½% on Distribution Property | 121,348 | 741,600 |
| Allocation of costs to W. Va. Sales | | $2,694,075 |

The Commission finds that the amount of $76,579 is an adequate allowance for Federal Income taxes for the future.[32]

The operating expenses allowed for the future are shown by the functional classification in the following tabulation:

| | 1940 | Adjustments For Future Operating Changes | As Adjusted For Future |
|---|---|---|---|
| **Interstate Operating Expenses:** | | | |
| Natural Gas Production | $ 1,227,930 | $ 202,172 | $ 1,430,102 |
| Gas Purchased | 8,533,779 | | 8,533,779 |
| Transmission Expenses | 1,818,335 | | 1,818,335 |
| Administrative and General Expense | 1,187,336 | ( 50,242) | 1,137,094 |
| Depletion | 624,440 | | 624,440 |
| Depreciation | 835,597 | | 835,597 |
| Amortization—other | 5,996 | | 5,996 |
| Exploration and Development Costs | 407,920 | 192,080 | 600,000 |
| Taxes—State and Misc. Federal | 1,133,892 | 77,150 | 1,211,042 |
| Federal Income Tax | 912,813 | (835,734) | 77,079 |
| Total Interstate | 16,687,508 | (414,574) | 16,272,934 |
| **Specific Distribution Expenses:** | | | |
| Distribution | 215,128 | | 215,128 |
| Customers' Accts., Coll. & Sales Promotion | 160,908 | | 160,908 |
| Adm. and Gen. Expense | 13,231 | | 13,231 |
| Depreciation | 89,345 | | 89,345 |
| Taxes | 141,640 | | 141,640 |
| Total Distribution | 620,252 | | 620,252 |
| Total Operating Expenses | $17,307,760 | $ 414,574) | $16,893,186 |

[32] Computed as follows:

| | |
|---|---|
| Net Taxable income for 1940 | $3,801,304 |
| Reduction in revenues | 3,609,857 |
| Revised Net taxable income | 191,447 |
| Tax Rate | 40% |
| Allowance for Income Tax | $ 76,579 |

## RATE OF RETURN

Many factors enter into the determination of what constitutes a fair rate of return in each rate case. The Supreme Court has stated the principal factors in *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm.*, 262 U. S. 679, 692-3. They are that the return of a public utility shall be equal to that generally being made at the same time and in the same region on investments in other enterprises attended by corresponding risks and, that the return should be sufficient to assure confidence in the financial soundness of the utility and to maintain its credit and enable it to attract the capital necessary for the proper discharge of its public duties.

The record contains an abundance of evidence on the subject of rate of return. The information includes investors' appraisal of the natural gas industry, comparative risk data, interest rates and yields on securities of natural gas and electric utilities, statistics showing the growth and stability of the natural gas industry, the trend of the cost of money and its current cost, commodity price indices, industrial production, employment, and payroll indices, federal reserve bank rediscount rates, national income payments and other economic data, idle money statistics, the financial history of the Hope Company and the facts about recent financing by its parent Standard Oil Company. That evidence reveals unmistakably that, compared to industrial and railroad enterprises, the utility business has relatively greater stability. Moreover, it shows also that interest rates generally are now lower than they have ever been in this century; it discloses that the yields on better issues of natural gas company bonds sold in the last year or two are close to 3%.

The Company's contention that it should be allowed a rate of return not less than 8% is unreasonable. The record shows that the Hope Company is a seasoned enterprise whose risks have been minimized by (1) ample past and present provisions for depletion and depreciation with con-

current high profits; (2) protected established markets, through affiliated distribution companies, in populous and industrialized areas; and (3) available supplies of gas locally to meet requirements, except on certain peak days in the winter, which it is feasible to supplement in the future with gas from other sources. During the forty-two years of its history, to 1941, Hope has earned on its owners' equity an annual average profit of 12% and, in addition, has built up through annual provisions charged to expense, depletion and depreciation reserves far in excess of requirements. Hope faces no hardship with respect to increased taxes, operating expenses, and inflation, greater than those faced by similar enterprises. The Company's efficient management, established markets, financial record, affiliations, and its prospective business place it in a strong position to attract capital upon favorable terms when it is required.

In making the findings on rate of return, the national and international situations have commanded our attention and entered our deliberations. The Commission is aware of the increased demands made upon Hope for gas due to the war program. Considering these matters, the underlying factors, and all of the evidence in the record, the Commission finds that 6½% is the fair rate of return for the Hope Natural Gas Company. This rate of return being for the future, has been set only after endeavoring to weigh all known and predictable elements; in setting it we have made allowance for presently unforeseeable contingencies. Our views on the subject of rate of return are consonant with recent decisions by the Supreme Court and other courts and commissions involving natural gas companies.[33]

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[33] *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ....; *Peoples Gas Light & Coke Co. v. Slattery*, 373 Ill. 31, 25 N. E. (2d) 482, 500-501; 31 P. U. R. (N. S.) 193, 217-218, Aff. Dis., 309 U. S. 634; *East Ohio Gas Co. v. Cleveland*, 27 P. U. R. (N. S.) 387, 412, Aff. 137 O. S. 225, 28 N. E. (2d) 599, 612-15, P. U. R. (N. S.) 158, 174-175; *Re Montana-Dakota Utilities Co.*, 32 P. U. R. (N. S.) 121, 128; See *Re Canadian River Gas Co. et al.*, F. P. C. Op. 75.

## LAWFULNESS OF PAST RATES

In 1938 the Cities of Cleveland and Akron, Ohio, filed complaints with the Federal Power Commission alleging that the rate which Hope charged East Ohio Gas Company was unjust, unreasonable and unlawful. These complaints were registered before Hope filed its five interstate wholesale rate schedules which are involved in these proceedings. The acceptance of a rate schedule for filing does not mean that the Commission approves it, and does not establish the justness or reasonableness of the rate. *Re Home Gas Co.*, 39 P. U. R. (N. S.) 102, 109. On October 14, 1938, this Commission instituted an investigation of the reasonableness of all of Hope's interstate rates. If it had been possible to adduce the volume of evidence required for the disposition of such a complex matter within a few months, the Commission would have prescribed the reasonable interstate wholesale rates for 1939 and subsequent years. The City of Cleveland raised the issue of the lawfulness of the rate charged by Hope to the East Ohio Gas Company and asked this Commission, as an aid to State regulation, to make a separate determination of the reasonable rates since June 30, 1939. Originally the City of Cleveland requested this Commission to find the lawful Hope-East Ohio rates since June 21, 1938, but it now represents that the subject is idle for rates prior to June 30, 1939, because those rates which Cleveland consumers were obligated to pay East Ohio have been settled. The Commission does not have the authority to fix rates for the past and to award reparations. But Congress did empower and instruct the Commission in Section 5(a) of the Natural Gas Act to fix future rates, and as a step in that process we must necessarily consider the reasonableness of past and existing rates. When the issue is raised and the public interest will be served, we consider as a necessary part of that duty the power to examine the entire rate problem involved and to determine what rates were lawful in the past. Also, Section 14(a) of the Act authorizes the Commission to investigate any facts

which it finds necessary in order to determine whether Hope has violated any provision of the Natural Gas Act. Furthermore, the Commission has power to perform any act, pursuant to Section 16, which is necessary or appropriate to carry out the provisions of the Act. Under Section 4(a) of the Act any interstate wholesale rate that is not just and reasonable is unlawful. *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. .... Hope's rate collected from East Ohio Gas Company was lawful after June 21, 1938, the effective date of the Act, only to the extent that it was just and reasonable. The City of Cleveland states that the Ohio Commission is investigating the reasonableness of the East Ohio Gas Company's bonded retail rates in Cleveland for the period since June 30, 1939, and that the lawfulness of Hope's rate is an important factor in the case. Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness of the interstate wholesale rates charged by Hope and other natural gas companies.[34]

In response to the request of the City of Cleveland, the Commission will make the appropriate findings of fact as to the lawfulness of the rates charged East Ohio by Hope since June 30, 1939. The Interstate Commerce Commission has furnished precedents for the performance of this public duty.[35] Congress intended that this Commission cooperate with State Commissions and municipalities, and the provisions of Sections 5(b) and 17 are special evidence of such intent.

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[34] Sections 1, 2, 4 and 5(a). See *Missouri v. Kansas Natural Gas Co.*, 265 U. S. 298, 308; *Illinois Natural Gas Co. v. Central Illinois Public Service Co.*, 314 U. S. 498, 506; *Kentucky Nat. Gas Corp. v. P. S. C.*, 28 F. Supp. 509, 513, aff. 119 Fed. (2d) 417.

[35] *W. A. Barrows Porcelain Enamel Co. v. Cushman Motor Delivery Co.*, 11 M. C. C. 365, 366; *Dixie Mercerizing Co. v. ET & WNC Motor Transp. Co.*, 21 M. C. C. 491, 492. See: *United States v. Morgan*, 307 U. S. 183, 313 U. S. 409; *Lima Tel. Co. v. P. U. C.*, 98 O. S. 110, 120 N. E. 330.

## REASONABLE EARNINGS AND RATES FOR THE FUTURE

Future reasonable earnings and rates must be fixed with consideration of a forecast of operating revenues and expenses. The most recent experience of the Company is the best guide for prognostications. The President of the Company predicted a great increase in sales for 1941 over 1940. Comparative income figures for the first quarters of 1940 and 1941 show an increase of $592,000 in net operating income or about 20%. The increasing demands for natural gas in the industrialized areas of Hope's markets are common knowledge. It seems certain that 1940 will be the lowest year, on an earnings basis, of the 1940-1944 period. Upon a consideration of all the relevant facts in the record and the future prospects, the Commission finds that 1940 is a conservative "average" year and should be used in rate-making in these proceedings. This is a conservative basis because allowance will be made for all probable future increases in the rate base and operating expenses while the operating revenues for the relatively low year of 1940 are employed as the test in fixing rates for the future.

Applying the 6½% rate of return to the rate base for the future of $33,712,526, produces $2,191,314 as the amount of annual return which the Company is entitled to earn in the future. Hope's income available for return is not less than $5,801,171, so the excess of $3,609,857 is the sum by which existing revenues must be reduced.

Hope's gas sales revenues are classified between intrastate sales and interstate sales for purposes of determining the sales and rates subject to the jurisdiction of this Commission.

Hope's entire properties are located within the State of West Virginia and production, transmission, compressing and general facilities are used jointly for intrastate or local sales and interstate or export sales. Therefore, a classification or allocation is necessary to deter-

mine operating expenses and return applicable to the interstate business. Certain direct costs pertaining to distribution property and sales in West Virginia are easily segregated from the joint costs. The allocation of the remaining joint costs is made in accordance with the following facts and principles which are undisputed in the record and accepted by all parties to these proceedings.

The Company's local retail business in West Virginia is incidental to its major business of exporting gas from West Virginia. In determining the allocation of joint expenses to the local West Virginia business, this fact was given consideration, with the result that a smaller amount of expenses was allocated to that business than would have resulted by the application of one of the customary allocation methods. Briefly, the amount of joint expenses (including return) allocated to the local business was that amount which, together with the specific local expenses, would give the Company a 6½% return on the net investment in property used exclusively in the local business. As indicated above, a more orthodox allocation probably would have resulted in assigning a larger share of the joint costs to the West Virginia sales and a greater amount of the excess profit, although the amount would not be material, to the interstate sales. The method used was proposed by representatives of the Company and was not controverted.

The following schedule (Col. (c)) shows the excess of future net operating revenue over 6½% return on the interstate rate base, and Columns (d) and (e) show the prescribed rates and revenues after giving effect to the rate reduction:

## Net Operating Income Available For Return

Rate Base for Interstate Sales $33,712,526

| | M.c.f. | Before Reduction | After Reduction | |
|---|---|---|---|---|
| | | | Prescribed Rates M.c.f.—cents | Amount |
| (a) | (b) | (c) | (d) | (e) |
| Operating Revenues from Interstate Sales: | | | | |
| East Ohio Gas Company | 40,376,091 | $14,726,736 | 29.50 | $11,910,947 |
| Peoples Natural Gas Company | 9,738,612 | 3,457,207 | 28.50 | 2,775,504 |
| River Gas Company | 388,750 | 136,063 | 35.00 | 136,063 |
| Fayette County Gas Company | 859,106 | 270,618 | 28.50 | 244,845 |
| Manufacturers Light and Heat Company | 2,241,684 | 706,131 | 28.50 | 638,880 |
| Total Interstate Revenues | 53,604,243 | $19,296,755 | | $15,706,239 |
| Deductions: | | | | |
| Operating Expenses | | 16,272,934 | | 16,272,934 |
| Other Gas Revenues | | (83,275) | | (83,275) |
| Allocation of Costs to Local West Virginia Sales | | (2,694,075) | | (2,694,075) |
| Total Deductions from Interstate Revenues | | 13,495,584 | | 13,495,584 |
| Net Operating Income from Interstate Sales | | 5,801,171 | | 2,210,653 |
| 6½% Return on Interstate Rate Base | | 2,191,314 | | 2,191,314 |
| Excess of Future Net Operating Income over 6½% Return on Interstate Rate Base | | $ 3,609,857 | | $ 19,341[36] |

The Company's intrastate rates are under the jurisdiction of the Public Service Commission of West Virginia. The West Virginia Commission and the State of West Virginia are interveners in these proceedings and no objection was made by them to the method used herein for the allocation of cost to local operations in West Virginia.

The evidence on the cost of service allocated among the five customer companies and the conditions of service for the respective companies disclose that no reduction in rates is applicable to the affiliated River Gas Company.

[36] It is not considered necessary to refine average rates per m.c.f. more than the prescribed rates shown above and the result is the margin of $19,341.

Among other reasons for this determination, is the fact that the River Gas Company is a small company and has a poor load factor. Accordingly, the total amount of the reduction in interstate rates [illegible] applicable to the East Ohio Gas Company, Peoples Natural Gas Company, Fayette County Gas Company and the Manufacturers Light and Heat Company. The present average rates per m.c.f. are 36.5¢ for East Ohio Gas Company, 35.5¢ for the Peoples Natural Gas Company, 35¢ for the River Gas Company, and 31.5¢ for Fayette County Gas Company and the Manufacturers Light and Heat Company.

The conditions and characteristics of service required by the contracts, are similar for the East Ohio Gas Company and the Peoples Natural Gas Company with respect to obligations and priorities by classes of consumers, but there is a great difference with regard to delivery pressures. Hope Company delivers gas to the East Ohio Company at sufficiently high pressures so that no additional compression is required by the East Ohio Company for delivery of the gas to the ultimate consumers. On the other hand, Hope delivers gas to the Peoples Natural Gas Company, at various pressures, into that company's Brave Compressor Station and the Peoples Company must compress the gas for transportation to the ultimate consumers. From the evidence we conclude that the differential of one cent between the average price per m.c.f. for gas sold to the East Ohio and the Peoples Companies is reasonable, and it reflects the difference in the cost, conditions and characteristics of service.

Considering the cost of rendering service to the Fayette County Gas Company and the Manufacturers Light and Heat Company, and the conditions and characteristics of service to those companies, the fact that Hope knows precisely what deliveries it must make to them from day to day and the fact that those two companies buy less than 6% of the total gas sold by Hope, the Commission

finds that the rate for these companies should not be different from the rate paid by the Peoples Natural Gas Company. In the absence of compelling reasons to the contrary, it is good and desirable practice to fix rates that are uniform. Applying this principle in these proceedings the Commission will prescribe uniform rates for the Peoples Natural Gas Company, Fayette County Gas Company and the Manufacturers Light and Heat Company.

After considering all the evidence with respect to Hope's interstate wholesale rates and the proper average rates per m.c.f. for the five customer companies at the respective points of delivery, the Commission finds the following rates to be just and reasonable:

| | Average Rate Per M.c.f.—Cents |
|---|---|
| East Ohio Gas Company | 29.5 |
| Peoples Natural Gas Company | 28.5 |
| Fayette County Gas Company | 28.5 |
| Manufacturers Light and Heat Company | 28.5 |
| River Gas Company | 35.0 |

In passing, it might be noted that the over-all rate of return for 1940 would have been 8% if the new rates had been in effect that year and if the earnings from the distribution property had remained unchanged. This rate of return is reduced to 6½%, because of estimated increase in expenses and increase in rate base which we have allowed for the future.

Appropriate findings and order will be entered in accordance with this Opinion.

LELAND OLDS, *Chairman*.
CLAUDE L. DRAPER, *Commissioner*.
BASIL MANLY, *Commissioner*.
CLYDE L. SEAVEY, *Commissioner*.

Dated at Washington, D. C.
this 26th day of May, 1942.

LEON M. FUQUAY,
*Secretary*.

September 15, 1942, brief on behalf of the petitioner is filed.

Same day, supplement to brief on behalf of the petitioner is filed.

September 21, 1942, motion of respondent, City of Akron, to dismiss Part B of the Petition for Review is filed.

NOTE.—The motion to dismiss is in the words and figures following; to-wit:

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT

## No. 4979

OCTOBER TERM, 1942

HOPE NATURAL GAS COMPANY,
*Petitioner,*

vs.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON,
PENNSYLVANIA PUBLIC UTILITY COMMISSION,
*Respondents.*

## MOTION OF RESPONDENT, THE CITY OF AKRON, TO DISMISS PART B OF PETITION FOR REVIEW.

A. E. O'NEIL,
*Director of Law of The City of Akron,*
304 Municipal Building,
Akron, Ohio.

CLYDE B. MACDONALD,
*Assistant Director of Law,*
304 Municipal Building,
Akron, Ohio,

*Attorneys for Respondent, The City of Akron.*

September 21, 1942

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT

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## No. 4979

**OCTOBER TERM, 1942**

---

HOPE NATURAL GAS COMPANY,

*Petitioner,*

vs.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON,
PENNSYLVANIA PUBLIC UTILITY COMMISSION,

*Respondents.*

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## MOTION OF RESPONDENT, THE CITY OF AKRON, TO DISMISS PART B OF PETITION FOR REVIEW.

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The City of Akron, a respondent in the above entitled cause, moves this Honorable Court to dismiss Part B of the Petition for Review filed herein on the ground that the Court has no jurisdiction under Section 19 (b) of the Natural Gas Act (52 Stat. 831; 15 U.S.C.A. 717r (b)) to review the "Findings as to Lawfulness of Past Rates" entered by respondent, Federal Power Commission, on May 26, 1942. These "findings" do not constitute an

"order" within the meaning of Section 19 (b) of the Natural Gas Act.

A. F. O'NEIL,
*Director of Law of The City of Akron,*

CLYDE B. MACDONALD,
*Assistant Director of Law,*
*Attorneys for Respondent,*
*The City of Akron.*

## NOTICE OF MOTION.

Please take notice that this Motion of Respondent, The City of Akron, to Dismiss Part B of Petition for Review will be brought on for hearing before this Honorable Court on the 5th day of October, 1942, or as soon thereafter as the Court may hear the same in the Post Office Building in the City of Richmond, Virginia:

A. F. O'NEIL,
*Director of Law of The City of Akron,*

CLYDE B. MACDONALD,
*Assistant Director of Law,*
*Attorneys for Respondent,*
*The City of Akron.*

## PROOF OF SERVICE.

STATE OF OHIO,
SUMMIT COUNTY, SS.

Clyde B. Macdonald, attorney for respondent, The City of Akron, being first duly sworn, deposes and says that on the 19th day of September, 1942, he duly served

a copy of the within motion and brief in support thereof upon counsel for petitioner, Hope Natural Gas Company, by depositing the same on such date in the United States Post Office at Akron, Ohio, in a sealed envelope, with postage prepaid, addressed to William B. Cockley, Attorney for Hope Natural Gas Company, at his post office address, 1759 Union Commerce Building, Cleveland, Ohio; that on the 19th day of September, 1942, he duly served a copy of the within motion and brief in support thereof upon counsel for respondent, Federal Power Commission, by depositing the same on such date in the United States Post Office at Akron, Ohio, in a sealed envelope, with postage prepaid, addressed to Richard J. Connor, General Counsel, Federal Power Commission, Washington, D. C.; that on the 19th day of September, 1942, he duly served a copy of the within motion and brief in support thereof upon counsel for respondent, City of Cleveland, by depositing the same on such date in the United States Post Office at Akron, Ohio, in a sealed envelope, with postage prepaid, addressed to Thomas A. Burke, Jr., Director of Law, 204 City Hall, Cleveland, Ohio; that on the 19th day of September, 1942, he duly served a copy of the within motion and brief in support thereof upon counsel for respondent, Pennsylvania Public Utility Commission, by depositing the same on such date in the United States Post Office, at Akron, Ohio, in a sealed envelope, with postage prepaid, addressed to Claude T. Reno, Attorney General, Pennsylvania Public Utility Commission, Harrisburgh, Pennsylvania.

CLYDE B. MACDONALD.

Sworn to before me and subscribed in my presence this 19th day of September, 1942.

H. GLADYS SOUTH,
*Notary Public*

[NOTARIAL SEAL]

My commission expires April 5, 1943.

# United States Circuit Court of Appeals

FOR THE FOURTH CIRCUIT

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## No. 4979

OCTOBER TERM, 1942

---

HOPE NATURAL GAS COMPANY,
*Petitioner,*

vs.

FEDERAL POWER COMMISSION,
CITY OF CLEVELAND,
CITY OF AKRON,
PENNSYLVANIA PUBLIC UTILITY COMMISSION,
*Respondents.*

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## ADOPTION BY THE RESPONDENT CITY OF AKRON OF THE BRIEF OF RESPONDENT CITY OF CLEVELAND IN SUPPORT OF MOTION TO DISMISS PART B OF PETITION FOR REVIEW.

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The respondent, The City of Akron, affirms and adopts in full the brief of the respondent City of Cleveland in support of its motion to dismiss Part B of the Petition for Review, together with the Statement of Facts, Argu

ment, and Appendix and respectfully prays that said brief in support of the motion of the respondent City of Cleveland to dismiss Part B of the Petition for Review be considered in connection with and as part of the motion herein made by the respondent The City of Akron.

A. F. O'Neil,
*Director of Law of The City of Akron,*
304 Municipal Building,
Akron, Ohio,

Clyde B. Macdonald,
*Assistant Director of Law,*
304 Municipal Building,
Akron, Ohio,

*Attorneys for Respondent,*
*The City of Akron.*

September 22, 1942, motion of respondent, City of Cleveland, to enlarge time for filing brief is filed.

Same day, motion of respondent, City of Akron, to enlarge time for filing brief is filed.

Same day, motion of respondent, Federal Power Commission, to enlarge time for filing brief is filed.

Same day, joinder of respondent, Pennsylvania Public Utility Commission, in motions to enlarge time for filing briefs is filed.

September 23, 1942, application of respondent, Pennsylvania Public Utility Commission, for extension of time for filing brief is filed.

September 24, 1942, order granting special permission to respondent, Federal Power Commission, to file a brief in excess of 50 printed pages but not exceeding 150 printed pages is filed.

Same day, order granting special permission to respondent, Pennsylvania Public Utility Commission, to file a brief in excess of 50 printed pages but not exceeding 100 printed pages is filed.

Same day, order extending time to October 15, 1942, for the filing of the briefs of the respective respondents is filed.

September 30, 1942, brief on behalf of the petitioner on the motions to dismiss Part B of the Petition to Review is filed.

October 5, 1942, motion of respondents to extend the time for filing respondents' briefs from October 15, 1942, and to continue the case for oral argument to the November term, is filed in Open Court.

*Argument on motions*

October 5, 1942 (October term, 1942), cause came on to be heard on the motion of respondents to extend the time for filing respondents' briefs and to continue; and on the motions of the respondents to dismiss Part B of the Petition for Review, before Parker, Soper and Dobie, Circuit Judges, and was argued by counsel and submitted.

*Order continuing hearing on motions to dismiss part B of the petition for review; continuing case to the November term, and as to briefs. Filed and entered October 5, 1942*

(Style of Court and Title Omitted)

This cause came on to be heard on the motions of the respondents City of Cleveland and City of Akron to dismiss Part B of the Petition for Review;

For reasons appearing to the court,

It is ordered, by this Court, that the hearing on the motions to dismiss Part B of the Petition for Review be continued to the hearing on the merits; that this cause be, and it is hereby, continued to the November term of this Court, to be placed at the foot of the argument docket for that term; that the briefs on behalf of the respondents be filed on or before October 31, 1942, and that the reply brief, if any, on behalf of the petitioner, be filed not later than three days prior to the argument of the cause.

JOHN J. PARKER,
*Senior Circuit Judge.*

OCTOBER 5th, 1942.

October 31, 1942, brief on behalf of respondent, Federal Power Commission, is filed.

Same day, volumes I and II of appendix to briefs on behalf of respondents are filed.

Same day, brief on behalf of respondents other than Federal Power Commission is filed.

November 11, 1942, application of petitioner for special permission to file a reply brief exceeding 50 printed pages is filed.

November 16, 1942, reply brief on behalf of the petitioner is filed.

*Argument of cause*

November 18, 1942 (November term, 1942), cause came on to be heard before Parker, Soper, and Dobie, Circuit Judges, and was argued by counsel and submitted.

## United States Circuit Court of Appeals, Fourth Circuit

### No. 4979

HOPE NATURAL GAS COMPANY, PETITIONER

*versus*

FEDERAL POWER COMMISSION, CITY OF CLEVELAND, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, RESPONDENTS

On Pefition for Review of Orders of the Federal Power Commission

(Argued November 18, 1942. Decided February 16, 1943)

*Opinion*

Filed February 16, 1943

Before PARKER, SOPER and DOBIE, Circuit Judges

William B. Cockley (Walter J. Milde, Theodore R. Colborn, William A. Dougherty, Kemble White and Anthony F. McCue on brief) for Petitioner, and Milford Springer, Counsel for the Federal Power Commission, and Spencer W. Reeder, Assistant Director of Law in Charge of Utility Controversies for the City of Cleveland, (Charles V. Shannon, Louis W. McKernan and Howell Purdue, of counsel for the Federal Power Commission; Thomas A. Burke, Jr., Director of Law for the City of Cleveland; Robert E. May; Alexander W. Parker and Joseph M. Winston, Jr., Attorneys for City of Cleveland; A. F. O'Neil, Director of Law, and Clyde B. Macdonald, Assistant Director of Law for the City of Akron, Attorneys for City of Akron; Claude T. Reno, Attorney General of the State of Pennsylvania; Harry M. Showalter, Counsel, and Samuel Graff Miller, Assistant Counsel, Attorneys for Pennsylvania Public Utility Commission, on brief) for Respondents.

PARKER, Circuit Judge: This is a petition by the Hope Natural Gas Company, hereafter referred to as "Hope", to review an order of the Federal Power Commission under the provisions of sec. 19 (b) of the Natural Gas Act of June 21, 1938, 52 Stat. 831, 15 USCA 717 r (b). Hope, a subsidiary corporation of the Standard Oil Company of New Jersey, was organized under the laws of West Virginia in the year 1898 and since that time has been engaged in the production, transportation and sale of natural gas. 80% of its sales are in interstate commerce and are subject to the

jurisdiction of the Commission, but its interstate rates had not been regulated prior to this proceeding. In 1938 the cities of Cleveland and Akron, Ohio, filed complaints with the Commission alleging that the rates charged by Hope to the East Ohio Gas Company were unreasonable. The Pennsylvania Public Utility Commission filed complaints that the rates charged to the Peoples Natural Gas Company, the Fayette County Gas Company and the Manufacturers Light and Heat Company were also unreasonable. The Commission then instituted an investigation, on its own motion, into the reasonableness of all of Hope's interstate wholesale rates; and all of the proceedings relating to these rates were consolidated for hearing before the Commission.

On May 26, 1942, the Commission filed its opinion, findings and order holding that the rates charged since June 30, 1939 were unreasonable and establishing reduced rates for the future, the reduction ordered being approximately 20% in the rates charged the East Ohio Gas Company and the Peoples Natural Gas Company, both Standard Oil affiliates, to which by far the larger part of its sales were made. The rates to these companies were reduced from 36.5 and 35.5 cts. per m. c. f. to 29.5 and 28.5 cts. per m. c. f. respectively. Rates to two other companies, Fayette and Manufacturers, representing a small volume of the total sales, were reduced from 31.5 cts. to 28.5 cts.

The reductions in rates were ordered on the basis of findings made as to the value of Hope's property used in connection with its interstate business, the estimated operating expenses of the business and a rate of return upon investment of 6½%. Hope complains of the findings with respect to all of these matters but particularly with respect to the valuation of the property adopted as the rate base. The valuation adopted by the Commission as the rate base was arrived at by taking the cost of the property as shown by the books of the company, corrected for bookkeeping errors but without allowance for price increases or consideration of capital items theretofore charged to expenses, and deducting therefrom accrued depreciation based upon the estimated useful life of the property employed without reference to evidence as to its present condition based upon tests and observation. This method was applied to property taken over from other companies as well as to property originally purchased by Hope. The corrected book cost of the property was found to be $51,957,416, and depreciation was found to be $22,328,016 as of December 31, 1940, leaving a net investment of $29,629,400. To this was added $1,392,021 for net capital additions up until the effective date of the order, $566,105 for useful unoperated acreage and $2,125,000 for working capital. This gave a rate base of $33,712,526.

Hope introduced evidence to the effect that prior to 1923 labor costs in well drilling as well as the portion of the overhead expense of the company allocable thereto had been treated as expense in its bookkeeping entries, instead of being charged to capital account; that these items were a legitimate part of the cost of the property and present expenditures of like character were required to be so treated in the system of accounting prescribed by the Commission; that the items representing such expenditures prior to 1923 should be considered by the Commission as a part of the legitimate cost of the property notwithstanding they had been charged to expense; and that, when they were so considered, the cost of the property was shown to be $69,735,000, instead of $51,957,416.

It was shown that the property used by Hope in its interstate business had been constructed over a forty year period during which there had been great fluctuations in prices and that prices at the time of hearing were at a far higher level than they were during the years preceding the first world war. The Public Utilities Commission of Ohio had found the reproduction cost new of the property, as of June 30, 1937, to be $100,257,000 and its present value after depreciation to be $66,166,382.* Hope introduced an estimate of cost of reproduction new amounting to $97,340,000 and a statement showing that the application of price trends to original cost would result in a figure of $105,101,000. This price trend statement showed that for property placed in public service between 1891 and 1916 at an original cost of $25,249,550 the price trends gave a figure of $52,451,675, whereas for property placed in service between 1917 and 1938 at a cost of $45,303,889 the trended value was only $53,788,551. Hope contended that the allowance for depreciation should have been based on the actual condition of the property as determined by observation with allowance for obsolescence; and that the depreciation allowance resulting was 34.51%. Applying this rate of depreciation to the estimate of the cost of reproduction new of its property, it arrived at a rate base as of December 31, 1938, of $66,360,000.

The Commission found that Hope's estimates of reproduction cost and trended original cost were without probative value and disregarded them, as it did also Hope's evidence as to the observed condition of the property. No consideration was given to the change in price levels which was shown by the estimates and which, even in their absence, might have been noticed as matters of general and common knowledge.

*East Ohio Gas Co. v. City of Cleveland, 27 P. U. R. (N. S.) 387, 417. See also table 6 appended to report of Commission in that case but not published in Public Utilities Reports.

The vital questions in the case relate to the determination of the rate base; and, in view of the low rate of return allowed and the consequent lack of margin to take care of error in the base, the rates allowed must be condemned as unreasonable and confiscatory because of the following errors with respect to the valuation of the property constituting the base: (1) the Commission did not find the present fair value of the property and took no account of the change of price levels in determining the rate base; (2) the Commission ignored items of well drilling costs and overhead, aggregating in excess of $17,000,000, which entered into the original cost of the property, basing this action on the fact that, under the system of accounting that prevailed at the time, these items had been charged on the company's books to expense; and (3) the Commission ignored evidence as to the present condition of the property and computed accrued depreciation theoretically on the straight-line service-life method. We shall discuss these matters separately in the order named.

PRESENT VALUE

The report of the Commission shows, not only that it gave no consideration to rise in price levels in determining the amount of the rate base, but also that it made no attempt to ascertain the present fair value of the property involved. It adopted as the rate base the original cost of the property as shown by the company's books, adjusted to correct bookkeeping errors and depreciated as above indicated. It took the view that this depreciated book cost could properly be taken as the base without reference to whether it did or did not represent the present fair value of the property, saying: "With the decline in favor of 'fair value' as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates."

Much is to be said in favor of the prudent investment theory of determining the rate base. It is simple; it is expeditious; and it avoids the necessity of resorting to unsatisfactory estimates of the cost of reconstructing a system that no one would now reconstruct. Where there has been no great change in price levels, prudent investment cost can be taken, subject to appropriate depreciation, as representing the present fair value of the property for rate making purposes. And even where there have been changes in price levels, it can be thus taken, we think, if such basis has been established by legislative authority prior to the dedication of the property to public use or if statutory provision has been made for valuation of the property on the basis of present fair value and the use of prudent investment cost in the future, and the property

has been so valued. See Bauer & Gold, "Public Utility Valuation for Purposes of Rate Control" (1934) pp. 424 et seq. In the absence of such legislation and valuation, however, such depreciated original cost cannot be taken as the rate base where there has been a change in the level of prices and the investment in the utility has been made while the "fair value" theory was prevailing. As is well said in Bauer & Gold, supra, pp. 424 and 425:

"If the rights and obligations of future investors are exactly set forth, and if systematic provisions are made for enforcement, they would doubtless be held subject to the conditions. If they furnish capital under a policy explicitly enunciated, they can have no grounds for claiming that they are deprived of 'due process.' For all future dealing, legislatures are probably free to establish any policy that seems desirable from the public standpoint. They are probably not required to continue the indefinite basis of dealing with all future investments merely because no definite policies and standards were established in the past.

"The situation, however, is different with regard to properties constructed or installed in the past. As to these, the funds were contributed under the general law of the land, without exact limitations upon the return. Except for the undefined rule that they were entitled to fair return on fair value, they were not placed under precise and systematic control. If prices increased after the date of investment, the companies have been entitled to have the advance recognized in new valuations. This right probably cannot be abrogated on grounds of public policy unless a proper equivalent is provided. While the right itself is vague and variable, it nevertheless exists and presumably cannot be modified except through replacement by a definite substitute that is fair and reasonable."

And the same authors, in dealing with the method of establishing a fixed rate base "through outright adoption of investment as rate base, starting with existing book value of the properties on the basis of present accounting methods", point out as an objection to it that fluctuation in prices may not be ignored. At pp. 432 and 433 they say:

"Besides doubts as to reliability of present book figures, the proposal also raises the question as to how the shift in price level should now be treated in the light of fallen prices. Under the law of the land there is no doubt but that the public is entitled to have fair value determined according to present and prospective prices. If 'fair value' does not rest exclusively upon reproduction cost levels, it certainly must be determined nevertheless largely with consideration to the price changes that have taken place. Properties installed during the pre-1929 era back to about

1914, would have to be repriced on the basis of the new level. Furthermore, the public is entitled also to have considered the advances in technology which resulted in reduced unit cost of construction. These adjustments would be entirely ignored in outright adoption of book value as the starting point of a fixed rate base.

"These are matters of important consideration in planning and establishing the new policy of control. For the future, the purpose is, of course, to eliminate the factor of price fluctuations from consideration in the rate base. In the past, however, under present law, this has been the dominant element in valuation and primarily responsible for the unsatisfactory conditions of regulation. *But if a fixed rate base is to be established, the question should not be ignored as to how the price changes that have taken place should be provided for in the adoption of initial rate base.*" [Italics supplied.]

There is nothing in the Natural Gas Act which justifies the thought that Congress was providing therein for the exclusive use of the prudent investment theory of property valuation. No "fixed rate base" as advocated by Bauer & Gold is referred to, and no provision is made for initial valuation of properties with addition of subsequent investment costs as the base. On the contrary, the usual general provision for "just and reasonable" rates is made in sec. 4 (a) of the Act; and, as we shall point out hereafter, it is well settled in existing law that, to be considered "just and reasonable", rates must be such as to yield a fair return upon the fair value of the property used in rendering the service. In sec. 6 (a) provision is made for the Commission to ascertain the actual legitimate cost of the property and the depreciation therein, "and, when found necessary for rate making purposes, other facts which bear on the determination of such cost or depreciation *and the fair value of such property*" [Italics supplied.]

The pertinent sections of the Natural Gas Act, 52 Stat. 821, 15 USCA 717c (a) 717d (a), 717e (a) (b), are as follows:

"Sec. 4. (a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful."

"Sec. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged,

or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: Provided, however, That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates."

"SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

"(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction."

It was clearly the intention of Congress that under these sections the Commission might investigate and ascertain cost and depreciation of properties of natural gas companies, irrespective of whether a rate inquiry was involved or not, and that, where rate making was involved, the investigation might extend to other facts which bear on cost or depreciation and the fair value of the property. Instead of prescribing a change in the method of determining the rate base, it is clear that the statute contemplates that the base should be determined in accordance with existing legal rules; and it is basic in these rules that the present fair value of the property be ascertained so that rates may be established which will afford a fair return upon fair value and so will not be confiscatory in the constitutional sense. This we understand to be the construction given the Act in the recent case of Federal Power Commission v. Natural Gas Pipeline Co., 315 U. S. 575, 585, 586, where the Court, speaking through Mr. Chief Justice Stone, said:

"By long standing usage in the field of rate regulation, the 'lowest reasonable rate' is one which is not confiscatory in the constitutional sense. Los Angeles Gas Co. v. Railroad Commission, 289 U. S. 287, 305; Railroad Commission v. Pacific Gas Co.,

supra, 394, 395; Denver Stock Yard Co. v. United States, 304 U. S. 470, 475. Assuming that there is a zone of reasonableness within which the Commission is free to fix a rate varying in amount and higher than a confiscatory rate, see Banton v. Belt Line Ry. Corp., 268 U. S. 413, 422, 423; Columbus Gas Co. v. Commission, 292 U. S. 398, 414; Denver Stock Yard Co. v. United States, supra, 483, the Commission is also free under sec. 5 (a) to decrease any rate which is not the 'lowest reasonable rate.' *It follows that the Congressional standard prescribed by this statute coincides with that of the Constitution*, and that the courts are without authority under the statute to set aside as too low any 'reasonable rate' adopted by the Commission which is consistent with constitutional requirements.

"The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances." [Italics supplied.]

The conception that, not to be confiscatory, rates must yield a fair return upon the present fair value of the property has long been well settled by Supreme Court decisions. Munn v. Illinois, 94 U. S. 113, established the principle that rates of public utilities were subject to regulation by the state. Mr. Chief Justice Waite, who wrote the opinion in that case, laid down the limitation, however, in Stone v. Farmers Loan & Trust Co., 116 U. S. 307, 331, that the power could not be exercised to confiscate the property invested in the utility, saying, "From what has thus been said, it is not to be inferred that this power of limitation or regulation is itself without limit. This power to regulate is not a power to destroy, and limitation is not the equivalent of confiscation. Under pretense of regulating fares and freights, the State cannot require a railroad corporation to carry persons or property without reward; neither can it do that which in law amounts to a taking of private property for public use without just compensation, or without due process of law." Regulation of rates of public utilities differs from ordinary price fixing such as was involved in Nebbia v. New York, 291 U. S. 502, in that, in the case of a public utility, property has been dedicated to the use of the public and the state can require its continued operation, whereas in the case of ordinary property subject to price regulation the owner is not required to sell. By dedicating his property to public use the owner impliedly consents to regulation of its rates by the state; but this consent is conditioned upon his property's not being taken from him under the guise of regulation, i. e. that the rates fixed allow him a fair return

upon its fair value. The rule is thus stated in the Minnesota Rate Cases, 230 U. S. 352, 434:

"The basis of calculation is the 'fair value of the property' used for the convenience of the public. Smyth v. Ames, supra (p. 546). Or, as it was put in San Diego Land & Town Co. v. National City, supra (p. 757), 'What the company is entitled to demand, in order that it may have just compensation, is a fair return upon the reasonable value of the property at the time it is being used for the public.'"

In Los Angeles Gas Co. v. R. R. Com'n, 289 U. S. 287, 305, cited with approval by Mr. Chief Justice Stone in Federal Power Commission v. Natural Gas Pipeline Co., supra, Mr. Chief Justice Hughes laid down the criterion in the following language:

"As the property remains in the ownership of the complainant, the question is whether the complainant has been deprived of a fair return for the service rendered to the public in the use of the property. This Court has repeatedly held that the basis of calculation is the fair value of the property, that is, that what the complainant is entitled to demand, in order that it may have 'just compensation,' is '*a fair return upon the reasonable value of the property at the time it is being used for the public.*' In determining that basis, the criteria at hand for ascertaining market value, or what is called exchange value, are not commonly available. The property is not ordinarily the subject of barter and sale and, when rates themselves are in dispute, earnings produced by rates do not afford a standard for decision. The value of the property, or rate base, must be determined under these inescapable limitations. And mindful of its distinctive function in the enforcement of constitutional rights, the Court has refused to be bound by any artificial rule or formula which changed conditions might upset. We have said that the judicial ascertainment of value for the purpose of deciding whether rates are confiscatory 'is not a matter of formulas, but there must be a reasonable judgment having its basis in a proper consideration of all relevant facts.' Minnesota Rate Cases, 230 U. S. 352, 434; Georgia Railway & Power Co. v. Railroad Commission, 262 U. S. 625, 630; Bluefield Water Works Co. v. Public Service Commission, 262 U. S. 679, 690." [Italics supplied.]

Under this rule, in the absence of some such statutory provision as indicated at the beginning of this discussion, the determination of fair present value as the rate base is inescapable if there is to be a "fair return upon fair value". What has declined in favor is not, as the Commission thought, the "doctrine" of fair value, but the cumbersome and misleading reproduction cost theory as a means of determining it. Property has no value except present

value. Past value exists only in memory or in history, future value only in estimate or expectation. It is the property presently existing which belongs to the utility and is used by the public. It is that property which is depreciated through use and which is gradually being sold through depreciation to the public. And it is the value of that property as used which must be considered in fixing rates that will reimburse the company for its partial sale through use and provide an adequate return upon investment. If a piece of property which cost $10,000 originally but can only be replaced at a cost of $20,000, and is worth $20,000 to the company in carrying on its business, be treated as being worth only $10,000 for the purpose of depreciation and return, the company is deprived of property by the rate in exactly the same way as a merchant who is required to sell for $5 a pair of $10 shoes. It must not be forgotten that it is the property owned by the utility, and not the cash invested by stockholders in its stock, that is devoted to public use; that this property is worn out in furnishing the service which the public receives and which the utility is bound to render; and that, unless the utility receives a rate sufficient to make necessary replacements at current prices with a fair return upon the present fair value of its investment, its property is being taken from it and given to its customers.

The task of arriving at fair present value is a difficult one and necessarily involves exercise of judgment of a high order. The problem is easily over-simplified by those seeking to maintain a thesis. In times of falling prices, those representing the utilities emphasize the importance of original investment cost, while those seeking lower rates point out the folly of fixing rates on the basis of a value which no longer exists and demand that reproduction cost be taken as the criterion. In periods of rising prices, the position of the advocates is reversed. To fix value on original investment cost without reference to change in price levels may easily lead to absurdly high or low valuations, with an undue burden on the public in the case of falling prices and with such confiscation of the property of the utility in the case of rising prices as may result in its ruin. It is idle to argue that the utility should not complain if it recoups through its rates the original investment in its equipment. The law requires that the business of the utility go on. Its equipment must be replaced as it is worn out. And, if the rates allowed are not sufficient to make replacements at current prices, bankruptcy is inevitable. On the other hand, estimates of reproduction cost do not provide a satisfactory method of arriving at value. Aside from the temptation of expert witnesses to overestimate costs in a theoretical reproduction, the fact is that nobody could or would build the utility again as it has

grown up through the years. While reproduction cost may be considered, therefore, it is not ordinarily, standing alone, a fair criterion of valuation.

The duty of the Commission to determine the present fair value of the property and to give consideration to all factors entering into that value is thus stated by Mr. Chief Justice Hughes in the case of Los Angeles Gas Co. v. R. R. Com'n, supra, 289 U. S. at 306:

"The actual cost of the property—the investment the owners have made—is a relevant fact. Smith v. Ames, 169 U. S. 466, 547. But while cost must be considered, the Court has held that it is not an exclusive or final test. The public have not underwritten the investment. The property, on any admissible standard of present value, may be worth more or less than it actually cost. The time and circumstances of the outlay, and the effect of altered conditions demand consideration. Even when cost is revised so as to reflect what may be deemed to have been invested prudently and in good faith, the investment may embrace property no longer used and useful for the public. This is strikingly illustrated in the present case, where the Company has a large gas manufacturing plant which, in view of the supply of natural gas, has not been used for several years and is not likely to be used for many years to come, if at all. But no one would question that the reasonable cost of an efficient public utility system 'is good evidence of its value at the time of construction.' We have said that 'such actual cost will continue fairly well to measure the amount to be attributed to the physical elements of the property so long as there is no change in the level of applicable prices.' McCardle v. Indianapolis Water Co., 272 U. S. 400, 411. And when such a change in the price level has occurred, actual experience in the construction and development of the property, especially experience in a recent period, may be an important check upon extravagant estimates.

"This Court has further declared that, in order to determine present value, the cost of reproducing the property is a relevant fact which should have appropriate consideration. Southwestern Bell Telephone Co. v. Public Service Commission, 262 U. S. 276, 287, 288; Bluefield Water Works v. Public Service Commission, supra; Standard Oil Co. v. Southern Pacific Co. 268 U. S. 146, 156; McCardle v. Indianapolis Water Co., supra, p. 410. In Southwestern Bell Telephone Company v. Public Service Commission, supra, this Court said that 'it is impossible to ascertain what will amount to a fair return upon properties devoted to public service without giving consideration to the cost of labor, supplies, etc., at the time the investigation is made. An honest and intelligent forecast of probable future values, made upon a view of all the relevant circumstances, is essential. If the highly important element of

present costs is wholly disregarded such a forecast becomes impossible.' See St. Louis & O'Fallon Railway Co. v. United States, 279 U. S. 461, 485. But again, the Court has not decided that the cost of reproduction furnishes an exclusive test. See Smyth v. Ames, supra; Minnesota Rate Cases, supra; Georgia Railway & Power Co. v. Railroad Commission, supra. We have emphasized the danger in resting conclusions upon estimates of a conjectural character. We said, in Minnesota Rate cases, supra, p. 452,—'The cost-of-reproduction method is of service in ascertaining the present value of the plant, when it is reasonably applied and when the cost of reproducing the property may be ascertained with a proper degree of certainty. But it does not justify the acceptance of results which depend upon mere conjecture. It is fundamental that the judicial power to declare legislative action invalid upon constitutional grounds is to be exercised only in clear cases. The constitutional invalidity must be manifest and if it rests upon disputed questions of fact, the invalidating facts must be proved. And this is true of asserted value as of other facts.' The weight to be given to actual cost, to historical cost, and to cost of reproduction new, is to be determined in the light of the facts of the particular case. McCardle v. Indianapolis Water Co., supra."

In the pending case, original investment cost cannot be taken alone as a measure of the present fair value of the property because of the great changes in the prices of labor and materials which have occurred over the more than forty years during which the investments in the property have been made. These changes are matters of general and common knowledge and are shown by many publications, statistical reports and other documents readily available. That such changes have occurred is shown also by the evidence offered before the Commission. It is true that the statements of reproduction cost and trended original cost fail to allow for the increased productivity of labor and fail to take account of other pertinent factors; and the Commission, we think, was justified in refusing to accept the conclusions therein contained. But this does not mean that the Commission could ignore the change in price levels which was clearly established and was matter of general and common knowledge otherwise. The Commission's staff prepared statements showing that the conclusions of Hope's reproduction cost and trended cost statements should not be accepted. They could doubtless have furnished estimates as to the proper effect to be accorded price trends in the correct valuation of the property. At all events, the Commission should have given consideration to the matter; and, if of opinion that investment cost was a true measure of the present value of the property notwithstanding increase in prices, it should have found this as a fact.

It could not absolutely ignore the fact of increased price levels in determination of present fair value. This is clearly laid down by Mr. Chief Justice Hughes in Los Angeles Gas Co. v. R. R. Com'n, supra, and is firmly established by repeated decisions of the Supreme Court.

In the recent case of McCart v. Indianapolis Water Co., 302 U. S. 419, the Supreme Court affirmed a holding of the Circuit Court of Appeals that a decision of a district court should be reversed and the case remanded for a redetermination of value because of an upward trend in prices of which the Circuit Court of Appeals took judicial notice and which the District Court had not taken into account.

In West v. C. & P. Tel. Co., 295 U. S. 662, the Supreme Court, in condemning the use of certain price trend indices in connection with cost as establishing present value, said:

"The established principle is that as the due process clauses (Amendments V and XIV) safeguard private property against a taking for public use without just compensation, neither Nation nor State may require the use of privately owned property without just compensation. When the property itself is taken by the exertion of the power of eminent domain, just compensation is its value at the time of the taking. So, where by legislation prescribing rates or charges the use of the property is taken, just compensation assured by these constitutional provisions is a reasonable rate of return upon that value. To an extent value must be a matter of sound judgment, involving fact data. To substitute for such factors as historical cost and cost of production, a 'translator' of dollar value obtained by the use of price trend indices, serves only to confuse the problem and to increase its difficulty, and may well lead to results anything but accurate and fair. This is not to suggest that price trends are to be disregarded; quite the contrary is true. *And evidence of such trends is to be considered with all other relevant factors.* St. Louis & O'Fallon Ry. Co. v. United States, 279 U. S. 461, 485; Clark's Ferry Bridge Co. v. Public Service Comm'n, 291 U. S. 227, 236." [Italics supplied.]

In that case, the District Court, departing from the method employed by the Maryland Commission, adopted as the rate base cost less depreciation reserve. This method the court likewise condemned, saying:

"The opinion in essence consists of the conclusion, that, all the circumstances considered, it will be fair to appraise the property at cost less depreciation reserve. This rough and ready approximation of value is as arbitary as that of the Commission, for it is unsupported by findings based upon evidence."

In McCardle v. Indianapolis Water Co., 272 U. S. 400, 411, the Court, in condemning a valuation which did not take account of a change in the level of prices, said:

"Undoubtedly, the reasonable cost of a system of waterworks, well-planned and efficient for the public service, is good evidence of its value at the time of construction. And such actual cost will continue fairly well to measure the amount to be attributed to the physical elements of the property so long as there is no change in the level of applicable prices. And, as indicated by the report of the commission, it is true that, if the tendency or trend of prices is not definitely upward or downward and it does not appear probable that there will be a substantial change of prices, then the present value of lands plus the present cost of constructing the plant, less depreciation, if any, is a fair measure of the value of the physical elements of the property. The validity of the rates in question depends on property value January 1, 1924, and for a reasonable time following. While the values of such properties do not vary with frequent minor fluctuations in the prices of material and labor required to produce them, they are affected by and generally follow the relatively permanent levels and trends of such prices."

In Southwestern Bell Tel. Co. v. Public Service Commission, 262 U. S. 276, 287, the Court said:

"Obviously, the Commission undertook to value the property without according any weight to the greatly enhanced costs of material, labor, supplies, etc., over those prevailing in 1913, 1914 and 1916. As matter of common knowledge, these increases were large. Competent witnesses estimated them as 45 to 50 per centum.

* * * * * * *

"It is impossible to ascertain what will amount to a fair return upon properties devoted to public service without giving consideration to the cost of labor, supplies, etc., at the time the investigation is made. An honest and intelligent forecast of probable future values made upon a view of all the relevant circumstances, is essential. If the highly important element of present costs is wholly disregarded such a forecast becomes impossible. Estimates for tomorrow cannot ignore prices of today."

In Bluefield Water Works & Imp. Co. v. Public Service Com., 262 U. S. 679, 689, the Court said:

"The record clearly shows that the commission in arriving at its final figure did not accord proper, if any, weight to the greatly enhanced costs of construction in 1920 over those prevailing about 1915 and before the war, as established by uncontradicted

evidence; and the company's detailed estimated cost of reproduction new, less depreciation, at 1920 prices, appears to have been wholly disregarded. This was erroneous."

See also Driscoll v. Edison Lt. & Power Co., 307 U. S. 104, 118–119.

The case of R. R. Commission v. Pacific Gas & Electric Company, 302 U. S. 388 is not to the contrary; for it appears in that case that the Commission there received and considered evidence of cost of reproduction and other evidence bearing upon the value of the property. Here no consideration whatever was given to change in price levels and its effect on value, and investment cost less depreciation is frankly taken as the rate base without any pretense that it represents value. As stated above, we find no fault in the action of the Commission in rejecting the estimates of reproduction cost and trended value; and we have considered whether we might not sustain the rate base on the theory that, upon the rejection of these estimates, the only evidence of value before the Commission was the evidence of investment cost. This, however, would be to close our eyes to the rise in price levels which are so great and far reaching that we must take judicial notice of them, and which are shown by the evidence to that effect included in the estimates. It would be to close our eyes also to the fact that the Commission has proceeded upon an erroneous theory of law in arriving at the rate base.

And there is nothing to the contrary in Federal Power Commission v. Natural Gas Pipeline Co., supra. It is true that in that case the court said that the Constitution "does not bind rate making bodies to the service of any single formula or combination of formulas"; but substantially the same thing had been said long before in the Minnesota Rate cases. See 230 U. S. at 434. It had been repeated by Mr. Chief Justice Hughes in the opinion in Los Angeles Gas Co. v. R. R. Com'n, supra, and appears in the opinions in a number of other cases. The concurring opinion does interpret the opinion of the court as holding that the Commission may now adopt prudent investment as a rate base and reject all other formulas. We think, however, in view of the expression in the majority opinion quoted above, to the effect that the rate must be one which is not confiscatory, that, in judging whether the rate is confiscatory or not, historical cost under the prudent investment theory can be adopted as the rate base without reference to other matters affecting value only where it can reasonably be found to represent present fair value. Rate making bodies may make pragmatic adjustments "within the ambit of their statutory authority," but the ambit of their authority does not extend to action which is confiscatory in char-

acter. Original cost or historical cost as shown by the books is evidence of value in all cases and can be adopted as representing present fair value where under all the circumstances of the case it is not unreasonable to do so. But, in the light of the cases cited above, it is unreasonable to adopt it as representing such value when, as in the case at bar, there has been a great change in price levels.

To sum up on this branch of the case: The Natural Gas Act makes no provision for a "fixed rate base" or the exclusive use of prudent investment in determining the base. Not to be confiscatory, rates must allow a fair return upon the present fair value of the property. To determine this fair return upon present fair value, the Commission must find what the present fair value of the property is. The Commission is not confined to any one formula or group of formulas in determining present fair value, but must determine it in the light of all the circumstances of the case. Prudent investment cost with proper allowance for depreciation may in some cases provide, without consideration of anything else, a proper measure of present fair value, but not where following investment there has been a decided change in price levels. Such a change in price levels is shown by the evidence in this case and besides is a matter of such general and common knowledge that the court must take judicial notice of it. The adoption by the Commission of investment cost less depreciation as the rate base, therefore, is arbitrary and unreasonable, does not conform to statutory requirements and is violative of the due process clause of the 5th Amendment to the Constitution.

EXCLUSION OF WELL DRILLING COSTS

Prior to 1923 Hope and the companies from which it acquired properties charged on their books to expense the labor cost directly involved in drilling new wells and the portion of overhead expense properly allocable thereto. The items so charged amounted to approximately $17,000,000, which, of course, does not take account of depreciation or depletion. Under the system of uniform accounts now prescribed by the Commission, such items are charged, as they should be, to capital investment; and such items since 1923 have been so charged by Hope because of a requirement to that effect in the West Virginia law. In valuing Hope's property, however, the Commission refused to consider in the valuation these items aggregating $17,000,000 (reduced by depletion and depreciation to around $4,000,000), because they had originally been charged on the books to expense, although they clearly represented investment in existing property.

If present fair value be taken as the criterion in determining the rate base, in accordance with our holding as to the legal and constitutional requirements in the premises, there can be no question but that the present fair value of these wells and all elements that have entered into that value must be given consideration, whatever be the method of accounting that Hope may have followed in entering the investment on its books. And, even if the prudent investment theory be adopted for determining the rate base, we see no valid reason for excluding these items from the investment. The wells are existing property used by the utility in its service to the public. The items entered into their cost just as truly as if they had been charged to capital account. No question is raised as to the investment being prudent; and the method of accounting employed with respect to the items cannot change the fact that they represent investment by the company in property which it uses in rendering the service for which rates are prescribed. "Original cost," says Mr. Justice Brandeis in a note to his celebrated dissenting opinion in Southwestern Bell Telephone Co. v. Public Service Commission, 262 U. S. 276, 295, "is the amount actually paid to establish the utility." In this note, which shows very clearly that under the prudent investment theory, historical cost, which is prudent investment, must take account of what the property would have cost on the basis of what normally should have been paid for it. He says:

"Original cost is the amount actually paid to establish the utility. The amount is ascertained, where possible, by inspection of books and vouchers, and by other direct evidence. If this class of evidence is not complete, it may be necessary to supplement it by evidence as to what was probably paid for some items, by showing prices prevailing for work and materials at the time the same were supplied. But the evidence of these prices is merely circumstantial, or corroborative, evidence of the amount actually paid. In determining actual cost, whatever the evidence, there is no attempt to determine whether the expenditure was wise or foolish, or whether it was useful or wasteful. Historical cost, on the other hand, is the amount which normally should have been paid for all the property which is usefully devoted to the public service. It is, in effect, what is termed the prudent investment. In enterprises efficiently launched and developed, historical cost and original cost would practically coincide both in items included and in amounts paid. That is, the subjects of expenditure would coincide; and the cost at prices prevailing at the time of installation would substantially coincide with the actual cost."

The question arose before the Interstate Commerce Commission in connection with the valuation of the New York, Philadelphia,

and Norfolk R. Co., 97 I. C. C. 273, 279, where the Commission said:

"The question to be determined is whether the voluntary act of the carrier in charging only a portion of the cost of road and equipment to its investment account estops it from thereafter claiming as investment the additional cost not charged out properly in the first instance. Under the mandate of the statute we are required to find the value of the property of the carrier. The investment account, when properly stated, constitutes evidence of value to which consideration must be given. In this case the investment in property being devoted to carrier purposes on valuation date is incompletely stated in that costs incurred therefor were entered as charges to income. If our present system of accounting had been in force when the entries were made the investment account would have included the amount here claimed as proper.

"In previous cases instances have been found where the investment account has been incorrectly kept, capital expenditures being recorded in operating expenses or as charges to income. In order to obtain an accurate statement of investment it has been necessary in such instances to reconstruct the accounts. Here the carrier has presented evidence of costs that have not been included in our restated investment figure, although the property was found in ownership and use on date of valuation, was inventoried and is included in our estimates of cost of reproduction new and less depreciation. The evidence is persuasive that the investment figure should be increased by the amount of $733,846.13 and our tentative report will be revised accordingly."

It is argued that the items charged to expense entered into the rates paid by the customers of the company, and that the company may not treat as capital investment the expenditures for property thus paid for by its customers. The answer, of course, is that the customers paid for gas, not for the construction of wells, and that neither the cost of the wells nor the company's ownership thereof is affected by the fact that it may have paid for them with the proceeds of rates that were unreasonably high. A very similar question was before the Supreme Court in Board of Commissioners v. New York Tel. Co., 217 U. S. 23. In that case the company had charged to annual expense an excessive amount for depreciation, which is not different in principle from charging items to expense that should be charged to capital, since in both cases charge to expense is increased and the charge to capital account decreased by the error. In denying a contention that the depreciation reserve thus accumulated, which had been invested in the business, should be used to make up a deficiency

in any year when earnings should be less than a reasonable return, the court said:

"Constitutional protection against confiscation does not depend on the source of the money used to purchase the property. It is enough that it is used to render the service. San Joaquin Co. v. Stanislaus County, 233 U. S. 454, 459; Gas Light Co. v. Cedar Rapids, 144 Ia. 426, 434, affirmed 223 U. S. 655; Consolidated Gas Co. v. New York, 157 F. 849, 858, affirmed 212 U. S. 19; Ames v. Union Pacific Railway Co., 64 F. 165, 176. The customers are entitled to demand service and the company must comply. The company is entitled to just compensation and, to have the service, the customers must pay for it. The relation between the company and its customers is not that of partners, agent and principal, or trustee and beneficiary. Cf. Fall River Gas Works v. Gas & Electric Light Com'rs, 214 Mass. 529, 538. The revenue paid by the customers for service belongs to the company. The amount, if any, remaining after paying taxes and operating expenses, including the expense of depreciation, is the company's compensation for the use of its property. If there is no return, or if the amount is less than a reasonable return, the company must bear the loss. Past losses cannot be used to enhance the value of the property or to support a claim that rates for the future are confiscatory. Galveston Electric Co. v. Galveston, 258 U. S. 388, 395; Georgia Ry. v. R. R. Comm., 262 U. S. 625, 632. And the law does not require the company to give up for the benefit of future subscribers any part of its accumulations from past operations. Profits of the past cannot be used to sustain confiscatory rates for the future. Newton v. Consolidated Gas Co., 258 U. S. 165, 175; Galveston Electric Co. v. Galveston, supra 396; Monroe Gaslight & Fuel Co. v. Michigan Public Utilities Commission, 292 F. 139, 147. City of Minneapolis v. Hand, 285 F. 818, 823; Georgia Ry. & Power Co. v. Railroad Commission, 278 F. 242, 247, affirmed 262 U. S. 625; Chicago Rys. Co. v. Illinois Commerce Commission, 277 F. 970, 980; Garden City v. Telephone Company, 236 F. 693, 696.

"Customers pay for service, not for the property used to render it. Their payments are not contributions to depreciation, or other operating expenses, or to capital of the company. By paying bills for service they do not acquire any interest, legal or equitable, in the property used for their convenience or in the funds of the company. Property paid for out of moneys received for service belongs to the company, just as does that purchased out of proceeds of its bonds and stock."

See also Smith v. Illinois Bell Tel. Co., 282 U. S. 133, 158, and Lindheimer v. Illinois Tel. Co., 292 U. S. 151.

A question arises as to whether the decision in the Board of Commissioners v. New York Telephone Company, supra, is not in conflict with what was said in Railroad Commission v. Cumberland Tel & Tel. Co., 212 U. S. 414, quoted from and relied on in the brief of the Commission. If there were such conflict, it would be our duty to follow the decision in the New York Telephone case, as it is the latest expression of the Supreme Court on the matter. But rightly understood, there is no conflict in the decisions. In the Cumberland case the court said, "We are not considering a case where there are surplus earnings after providing for a depreciation fund, and the surplus is invested in extensions and additions."

We have considered the cases of which Natural Gas Co. v. Public Service Commission, 95 W. Va. 557, 121 S. E. 716, may be taken as typical, to the effect that, when a company has had its rates fixed by a public service commission on the basis that certain items represent expense of doing business, it may not thereafter treat the same items as representing capital investment. Without questioning the soundness of these decisions, we think that they have no application here. This is the first proceeding for fixing the interstate rates of the company. A proceeding in West Virginia in the year 1921 fixed intrastate rates; but these related to the comparatively small portion of the company's business done in West Virginia and had no relation to interstate sales. It does not appear, moreover, to what extent, if any, the well drilling costs here under consideration were relied upon as expense of operating in the fixing of those rates, or that the rates charged were higher than they would have been if the costs had been charged to capital and the depreciation thereon charged to expense. It is suggested that the local rates of the East Ohio Gas Co. were based upon the interstate charges of Hope; but there were no proceedings before a utility commission for fixing those rates prior to the time that Hope ceased charging the well drilling items to expense, and it does not appear to what extent, if any, the rates of East Ohio as fixed by municipal ordinances and court proceedings were affected by Hope's expensing of these items.

It should be kept in mind that what the Commission must determine is the value of the company's property, whether the method used be the prudent investment method or some other. If the property were being condemned, no one would suggest that items which went into the cost of producing it should not be considered as a part of its cost, whatever method of accounting it had employed. If it were being sold on the basis of cost, no court would exclude such items from consideration. And there is as little ground for excluding them from consideration in a proceed-

ing like this, where value is being determined as a basis for rates which must compensate the company for the gradual sale of its property through use as well as provide a return upon its investment. Certainly if the company had charged to capital investment items which should have been charged to expense, there would be no excuse for not eliminating them in the valuation of the property; and there is as little excuse for not considering as capital investment items erroneously charged to expense. Bookkeeping which does not reflect realities must not be allowed to obscure the real nature of the inquiry.

DEPRECIATION

It is elementary that, whatever method be adopted for arriving at the valuation of the property, account must be taken of accrued depreciation. The Commission computed accrued depreciation by applying the straight-line service-life method to its properties, i. e. by finding a rate of depreciation based on the average service life of property, multiplying this by the years the property had been in use, and applying this percentage to the book cost of the property. The unit of production method was applied to "plant costs associated with gas supply".* Hope offered evidence of the present condition of the property, but this was condemned by the Commission as unreliable, and no consideration was given to present condition, other than that arrived at by applying the straight-line service-life formula as the measure of depreciation.

Hope contends that the application of the Commission's formula to book cost results in consequences which are inequitable and absurd in the light of existing facts. Thus, it points out that its well equipment having a book cost at the end of 1938 of $7,610,510 was depreciated to $3,222,807, or 42.4% of its cost, whereas the salvage value of such equipment over the past 10 year period has been 65.2%. Field line equipment having a book cost of $7,934,169 was depreciated to $4,088,602, or 51.5%, although the gross salvage value of such material has been 56.7%. Counsel for the Commission challenge the use of the term "salvage value" in connection with this property; but, without going into this controversy, it is sufficient to say that the Commission's method results in a depreciated value which is less than that which the company has accorded similar property under its system of accounting when removed from its wells or lines and held for further use. Other instances of absurd and inequitable consequences resulting from

*Hope complains also that, in the case of property acquired from other companies which had been taken over by Hope, the Commission deducted the depreciation reserve of those companies from book cost, even though it exceeded straight-line service-life depreciation accrued at the time. In the view that we take of the broader question, however, it is not necessary to go into this.

the application of the Commission's formula to book cost are called to our attention; but it is unnecessary to go into them here.

Many of the consequences complained of will be eliminated when the present value of the property is considered in the light of changed price levels and the depreciation percentage is applied to the higher valuations resulting. We think, however, that the Commission may not close its eyes to the actual present condition of the property in determining present value and compute depreciation on the basis of mere formulas, as it has done in this case. The formulas which it has used are undoubtedly important matters for it to take into consideration; but its duty, under the law, is to determine the present fair value of the property, and this cannot be done without consideration being given to its actual physical condition. The point was directly involved in McCardle v. Indianapolis Water Co. 272 U. S. 411, 416. In that case deduction for depreciation based on the sort of formulas used here without consideration of the actual condition of the property was disapproved by the Supreme Court, the Court saying:

"There is deducted approximately 25 per cent of estimate cost new to cover accrued depreciation. The deduction was not based on an inspection of the property. It was the result of a 'straight line' calculation based on age and the estimated or assumed useful life of perishable elements. The commission's report indicates that the property is well-planned, well-maintained and efficient. Its chief engineer inspected it, and estimated its condition by giving effect to results of the examination and to the age of the property. He deducted about six per cent to cover depreciation. Mr. Hagenah made an estimate of existing depreciation based on actual inspection and a consideration of the probable future life as indicated by the conditions found. He deducted less than six per cent. Mr. Elmes testified that he made an inspection and estimate of all the actual depreciation. He estimated $443,044 would be required to restore the property as of appraisal date to its condition when first installed and put in practical operation. He deducted that amount. The testimony of competent valuation engineers who examined the property and made estimates in respect of its condition is to be preferred to mere calculations based on averages and assumed probabilities. The deduction made in the city's estimate cannot be approved."

This was but a restatement of the doctrine laid down in Pacific Gas & Electric Co. v. San Francisco 265 U. S. 403, 406, where the court said:

"Appellant objects to the application of this method and insists that depreciation should have been ascertained upon full consideration of the definite testimony given by competent ex-

perts who examined the structural units, spoke concerning observed conditions and made estimates therefrom. As these examinations were made subsequent to the alleged depreciation for the definite purpose of ascertaining existing facts, we think the criticism is not without merit. Facts shown by reliable evidence were preferable to averages based upon assumed probabilities. When a plant has been conducted with unusual skill the owner may justly claim the consequent benefits. The problem was to ascertain the probable result of the specified rate if applied under well-known past conditions, not to forecast the probable outcome of a proposed rate under unknown future conditions."

See also B. & O. R. Co. v. United States 298 U. S. 349, 378, where it is said "* * * that opinion of experts unsupported by adequate actual tests may not safely be substituted for concrete data."

In dealing with this subject, Bauer & Gold, after analyzing the broad concept of depreciation contained in the case of Knoxville v. Knoxville Water Co., 212 U. S. 1, go on to say (Public Utility Valuation for Purposes of Rate Control pp. 218–219):

"The Court doubtless intended to deal comprehensively with depreciation in the Knoxville case. It declared that due current provisions may be made as an operating cost and that all actual depreciation due to expired service life shall be deducted in the determination of fair value. The amount of deduction, however, was left as a matter of proof to be determined through evidence. Its determination, just as the establishment of reproduction cost new, depends upon affirmative proof. The same applies to every phase of valuation. No item can be included or deducted without valid basis of fact. Determination of reproduction cost new, or the primary valuation however determined, is one process; deduction for depreciation is a second. Each must be based upon facts. Neither can be taken out of the air nor based upon hypothetical or theoretical calculations and analyses."

And as bearing upon the necessity of inspection and the weight to be accorded evidence based thereon, it is said at page 220 of this comprehensive and well-considered work:

"Emphasis has been laid upon inspection as against calculation by formula in relation to expired life. The decisions, however, have not rejected the conception that depreciation consists of expired life. They have merely relied upon results of inspection as against abstract calculations of expired life that have not been checked against the realities as determined through physical inspection. While life tables may be important as general guidance, in a particular property or unit the economic life may be much greater or much less than the average presented in a life table. As a calculation based on life tables, expired life

of a unit may be 50%, but in reality it may be only 10% because of special conditions relating to the particular item. Conversely, however, theoretical calculation may show expired life of only 10%, while actual depreciation may be 50%.

"The differences in operating and maintenance conditions are so great between utility properties that inspection is necessary to determine reasonably the ratio of expired to total economic life of the different units. The object of examination is determination of this ratio. This may involve estimates as to remaining and relative expired life. But it would be judgment based upon actual inspection rather than upon mere theoretical calculations without regard to the actualities of the property."

Included in accrued depreciation by the Commission were items of $2,107,261 based upon the cost of future abandonment of gas wells and $722,757 upon the cost of future abandonment of other property. Contention is made that, in addition to the error of disregarding the present physical condition of the property in computing depreciation, there was error in adding to depreciation this accrued portion of the cost of future abandonment of property. We cannot agree with this contention. Prior to 1939, the cost of abandonment it is true had been charged to expense as it occurred. Under the Commission's system of accounting, however; the company was required to set up a depreciation reserve to provide for future abandonment; and in computing depreciation here, the portion of the depreciation reserve already accrued was added. The principle applied was manifestly correct. The future cost of abandonment constituted a charge against the property, which would have to be met whatever system of accounting was followed; and as the property was used, account should have been taken of this item as well as of investment already made. The cost of abandonment is not a matter which concerns only the last year of use and can therefore be considred an expense of that year. It is a matter which affects the entire cost of the property and must be taken into consideration throughout its entire useful life.

If a well, for example, had cost $10,000 and abandonment cost will amount to $1,000, the $1,000 as well as the $10,000 must be taken into account in fixing rates and depreciation as the well is used; and, assuming a life of 20 years, it is clear that at the end of 10 years the value consumed through use is not merely $5,000, or half the original investment, but $5,500, or half the total cost including the cost of abandonment. A purchaser at the end of ten years would not be justified in paying more than $4,500 for the well, because the abandonment cost of $1,000 would fall on him, and the use of the well for the remaining ten year period would only be worth a total of $5,500 from which the abandonment cost

would have to be paid. (In the illustration, no account is taken, as it should be, of the fact that the abandonment cost is to be incurred in the future and that the present worth of the sums required for abandonment, and not the principal sum, is the amount properly to be considered.) In arriving at the present value of the property, therefore, deduction must be made for the accrued portion of future abandonment cost allocable to the property as well as for depreciation in the investment already made in it, otherwise an inflated valuation will result. In computing the accrued portion, allowance must be made, having in mind the interest bearing quality of money, for the fact that the expenditure is to be made in the future. This is a matter of accounting which it is not necessary to elaborate here. The point is that, in arriving at the present value of the property, it is proper to include in depreciation the accrued portion of future abandonment cost properly computed.

OTHER MATTERS AFFECTING THE RATE BASE

Capital additions since 1940. The Commission accepted Hope's estimate of fixed capital expenditures for the years 1941, 1942, and 1943, amounting to $8,956,500. It deducted expenditures in expectation of new or increased business amounting to $1,270,000 and gross property retirements of $2,700,000, making an estimated net change in plant of $4,986,500. From this it deducted estimated net change in depletion and depreciation reserve after elimination of retirement losses chargeable against reserve, and found an estimated increase in net actual legitimate cost over the three year period of $2,784,042. This was divided by two, as the rate order became effective at approximately the middle point of the three year period, or July 15, 1942. The capital addition thus arrived at was $1,392,021. We find no error in this method. Hope complains of the refusal of the Commission to allow the estimated expenditure of $1,270,000 in expectation of new or increased business; but this was purely a matter of estimate, and we cannot say that the action of the Commission with respect thereto was erroneous or arbitrary.

Working capital. The Commission allowed $2,125,000 for working capital. Of this amount $1,228,599 was for material and supplies and is not subject to dispute. $896,401 was for cash working capital. This was arrived at by using 45 days as the lag in the receipt of revenues, and on this basis dividing by eight (as 45 days is the eighth part of a year) annual operating expenses, exclusive of gas purchases, taxes, and depreciation expenses. Since the gas which Hope purchases is paid for by its customers before it pays the producers for that gas, and since taxes are paid

long after the revenues to which they relate have been collected, we cannot say that there was anything erroneous or arbitrary in eliminating all allowance for gas purchases and taxes from this calculation. Had this been done in Hope's estimate, the result would have been $277,820 less than the amount allowed by the Commission. There is manifestly no error in this connection, therefore, of which Hope can reasonably complain.

OPERATING EXPENSES

Annual depreciation allowance. Hope complains because the Commission, in computing annual depreciation as an operating expense, has applied the rate arrived at by the straight-line service-life method above described to the original book cost of the property and, in addition, has excluded from consideration the items of approximately $17,000,000 representing well-drilling costs heretofore charged to expense. It is clear, we think, that annual depreciation must be computed on the basis of the present fair value of the property. The question was before the Supreme Court in United Railways and Electric Co. v. West 280 U. S. 234, 253-254, where the court said:

"The allowance for annual depreciation made by the commission was based upon cost. The court of appeals held that this was erroneous and that it should have been based upon present value. *The Court's view of the matter was plainly right.* One of the items of expense to be ascertained and deducted is the amount necessary to restore property worn out or impaired, so as continuously to maintain it as nearly as practicable at the same level of efficiency for the public service. The amount set aside periodically for this purpose is the so-called depreciation allowance. *Manifestly, this allowance cannot be limited by the original cost, because, if values have advanced, the allowance is not sufficient to maintain the level of efficiency.* The utility 'is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning.' Knoxville v. Knoxville Water Co., 212 U. S. 1, 13–14. This naturally calls for expenditures equal to the cost of the worn out equipment at the time of replacement; and this, for all practical purposes, means present value. *It is the settled rule of this Court that the rate base is present value, and it would be wholly illogical to adopt a different rule for depreciation.* As the Supreme Court of Michigan, in Utilities Commission v. Telephone Co. 228 Mich. 658, 666, has aptly said: 'If the rate base is present fair value, then the depreciation base as to depreciable property is the same thing. There is no principle to sustain

a holding that a utility may earn on the present fair value of its property devoted to public service, but that it must accept and the public must pay depreciation on book cost or investment cost regardless of present fair value. We repeat, the purpose of permitting a depreciation charge is to compensate the utility for property consumed in service, and the duty of the commission, guided by experience in rate making, is to spread this charge fairly over the years of the life of the property.'" [Italics supplied.]

While Mr. Justice Butler in a note to his concurring opinion in Lindheimer v. Illinois Telephone Co. 292 U. S. 151, 176, stated that the method of computing depreciation there was not in harmony with the principle of the decision in United Railways v. West, there is nothing to indicate that the court intended to overrule that decision. The question in the Lindheimer case was whether charges to depreciation were not excessive in view of expenditures for current maintenance and the proved condition of the property. The affirmative answer given to that question by the court lends no support to the position that, in computing depreciation, the present value of the property may be ignored and depreciation be computed by applying to original cost the straight-line formula. In so far as the decision may be said to have any bearing at all upon that question, it supports the contrary position.

In Federal Power Commission v. Natural Gas Pipeline Co. 315 U. S. 575, 592, the Supreme Court dealt with an amortization allowance for a "wasting-asset business of limited life." The court said:

"We need not now consider whether, as the Government urges, there can in no circumstances be a constitutional requirement that the amortization base be the reproduction value rather than the actual cost of the property devoted to a regulated business. Cf. United Railways Co. v. West, 280 U. S. 234, 265. It is enough that here the business, by hypothesis, will end in 1954, and that the amortization base, computed at cost and including property already retired, will be completely restored by 1954 by the annual amortization allowances."

Here we are dealing not with a "wasting asset business of limited life," but with an ordinary public utility which is required by law to continue its service to the public. One of the principal reasons for determining the present fair value of its property is that rates may be fixed which will take account of depreciation based on that value in such way as to permit replacements at current prices so as to maintain the level of efficiency. This purpose will be defeated, if depreciation is allowed on the basis of cost, where cost is less than present fair value. It will be defeated too, if a portion of the property used is excluded from the depreciated

base. The use of the straight-line service-life method of depreciation, like the prudent investment theory of valuation, has the merit of simplicity and ease of application. It can unquestionably be taken into consideration in arriving at depreciation. The Supreme Court has not yet said, however, that it may be used exclusively in cases where, because of change in price levels, cost does not represent fair present value; and the decision in United Railways v. West, supra, which has never been overruled, is squarely to the contrary.

In the present state of the law, it would seem clear that, if the present fair value of the property is found to be either greater or less than the original cost of the property less straight-line service-life depreciation, a proper allowance for the difference should be made in computing annual depreciation chargeable as expense. As pointed out by Mr. Justice Stone in his dissenting opinion in United Railways v. West, supra, however, the question is not a question of law but one of fact for determination by the Commission on all the evidence before it; and, as said in the work on Depreciation by the Staff of the Public Service Commission of Wisconsin (1933) p. 136: "While, as a practical measure, we are convinced that original cost is the proper basis for computing depreciation charges, nevertheless we believe that until the doctrine of the court regarding fair value is changed to prudent investment, it is at least not practical nor plausibly consistent in theory to compute depreciation on any base other than fair value."

And we do not think it proper to ignore, as the Commission did, the element of expense attributable to the depreciation of capital added to rate base after 1940. New property used by the company is subject to depreciation as well as old property; and we see no reason why annual depreciation with respect to the additions made to capital between 1940 and the effective date of the rate order should not have been considered as an element of expense.

Return from gasoline and butane operations of affiliate. Hope Construction and Refining Company, another Standard Oil subsidiary, extracts gasoline and other byproducts from the natural gas produced by Hope. This is in reality a part of Hope's natural gas business, although carried on by an affiliate. The Commission credited to Hope the portion of the profits realized by the affiliate after allowing cost of processing and 6½% return upon net investment. Although this results in crediting to the utility a greater portion of the net profits of the operation of the subsidiary than is ordinarily credited in such cases, we cannot say that the action of the Commission is so arbitrary and unreasonable as to be invalid; and it is well settled that, in the absence of arbitrary action resulting in a confiscatory rate, we may not substitute our judgment of what is right and proper for that of the Commission.

Federal income tax. It is elementary that taxes, including income taxes paid the federal government, are proper elements of expense of operation. The Commission found that $76,579 was a proper amount to allow for federal income tax for the future, although the evidence was that Hope paid $912,313 in federal income tax in 1940. Hope contends that the Commission, in adjudging its 1940 rates to be unreasonable, computed its income tax liability at a figure no greater than that estimated for the future, notwithstanding it had actually paid $912,313 on account of federal income tax in that year. As we have reached the conclusion, as stated more fully hereafter, that the Commission was without power to make findings as to the reasonableness of past rates, except as incidental to fixing rates for the future, we need not determine what allowance should be made for income tax in 1940. So far as rates for the future are concerned, changes in tax laws render irrelevant a discussion of the Commission's figures. In further proceedings to establish rates for Hope, due consideration will doubtless be given to federal income tax liability in estimating necessary expenses of operation, based upon what income tax Hope will be required to pay on income derived from rates found to be reasonable.

Selection of 1940 as test year. The Commission selected 1940 without regard to the experience of the years immediately prior thereto, as the test year for determining expense of operation in fixing future rates. It is ordinarily unsafe thus to adopt the experience of a single year as a guide. United Gas Public Service Co. v. Texas, 303 U. S. 123, 145; West Ohio Gas Co. v. Public Utilities Com'n, 294 U. S. 79, 81. We do not think that under the peculiar circumstances of the case, however, this action of the Commission can be condemned as arbitrary or unreasonable. The increased demand for gas resulting from war conditions, made the experience of 1940 a safer guide for the future than that of prior years. Hope makes much of the fact that the winter of that year was more than ordinarily severe and that the increased demand for gas resulted in a large percentage of sales representing gas from its own wells, which did not involve payment of the charge required by its contracts on gas purchased from others. The increased demand due to war conditions, however, must necessarily have the same effect, so far as this matter is concerned. The experience of 1940 was the only experience properly comparable. In further proceedings, the experience following 1940 can be added to the experience of that year to form a longer and more dependable test period.

Other matters affecting operating expenses. Hope's contention as to depreciation and return on distribution properties is sufficiently covered by what we have heretofore said about the neces-

sity of ascertaining present fair value. The contention that $165,963 for drilling a dry well should have been charged to expense in 1940 seems well taken; but the matter can have little bearing in future hearings, as the test period will doubtless cover 1941 as well as 1940 and it will be immaterial which year carries the charge. The amortization of rate case expense over a ten year period seems to be reasonable. It is to be hoped that rate controversies will not be matters of annual occurrence. Driscoll v. Edison Light & Power Co., 307 U. S. 104, 121.

RATE OF RETURN

The Commission fixed the rate of return at 6½%. There is no controversy as to the rule applicable in determining the rate. "What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." Bluefield Water Works & Improvement Co. v. Public Service Comm'n, 262 U. S. 672, 692.

Under this test we think that the rate of return of 6½% is reasonable. Hope is a well established natural gas company with markets in the industrial regions of Ohio and Pennsylvania protected through its affiliates East Ohio Gas Co. and Peoples Natural Gas Co. As a subsidiary of Standard Oil it has financial advantages that independent utilities do not possess. Cf. Wabash Valley Electric Co. v. Young, 287 U. S. 488, 501. The record shows that profits earned by industrial corporations on invested capital declined from 11.3% in 1929 to 7.5% by 1940. Profits of railroads declined to 3.3% and of utilities to 5.4%. Interest rates are at a low level and rates of return demanded by investors are among the lowest that have ever existed. Securities of natural gas companies were sold at rates between 3% and 6%, with yields on the bulk of bond issues being between 3% and 4½%. Under such circumstances, a finding that 6½% is a reasonable rate of return cannot

be disturbed. A like rate of return was approved by the Supreme Court for natural gas companies in Dayton Power & Light Co. v. Com'n, 292 U. S. 290, 311, and Federal Power Com'n v. Natural Gas Pipeline Co., 315 U. S. 575, 569.

PAST RATES

The Commission, while fixing rates to become effective July 1, 1942, found that the rates charged by Hope from June 30, 1939 to that date were unreasonable and unlawful and that the charges to the East Ohio Gas Company were "unjust, unreasonable, excessive and therefore unlawful to the extent of $830,892 during 1939, $3,215,551 during 1940, and $2,815,789 on an annual basis since 1940." It states that it made this finding because the City of Cleveland had raised the question of the lawfulness of the rate charged the East Ohio Gas Company by Hope and had requested that the Commission find the just and reasonable and lawful rate from June 30, 1939, to the date of the Commission's determination "as an aid to state regulation." With respect to its power to take such action, the Commission said:

"The Commission does not have the authority to fix rates for the past and to award reparations. But Congress did empower and instruct the Commission in section 5 (a) of the Natural Gas Act to fix future rates, and as a step in that process we must necessarily consider the reasonableness of past and existing rates. When the issue is raised and the public interest will be served, we consider as a necessary part of that duty the power to examine the entire rate problem involved and to determine what rates were lawful in the past. Also, section 14 (a) of the Act authorizes the Commission to investigate any facts which it finds necessary in order to determine whether Hope has violated any provision of the Natural Gas Act. Furthermore, the Commission has power to perform any act, pursuant to section 16, which is necessary or appropriate to carry out the provisions of the Act. Under section 4 (a) of the Act any interstate wholesale rate that is not just and reasonable is unlawful. Federal Power Commission v. Natural Gas Pipeline Co., 315 U. S. 575. Hope's rate collected from East Ohio Gas Company was lawful after June 21, 1938, the effective date of the Act, only to the extent that it was just and reasonable. The City of Cleveland states that the Ohio Commission is investigating the reasonableness of the East Ohio Gas Company's bonded retail rates in Cleveland for the period since June 30, 1939, and that the lawfulness of Hope's rate is an important factor in the case. Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness

of the interstate wholesale rates charged by Hope and other natural gas companies.

"In response to the request of the City of Cleveland, the Commission will make the appropriate findings of fact as to the lawfulness of the rates charged East Ohio by Hope since June 30, 1939. The Interstate Commerce Commission has furnished precedents for the performance of this public duty. Congress intended that this Commission cooperate with State Commissions and municipalities, and the provisions of sections 5 (b) and 17 are special evidence of such intent."

The fundamental difference between quasi-legislative and quasi-judicial power is that the one is concerned primarily with prescribing regulations for the future, the other with determining rights in the light of what has occurred in the past. Cf. Baer Bros. v. Denver & R. G. R. Co. 233 U. S. 479, 486. The Natural Gas Act shows clearly that it was the intention of Congress to give the Commission quasi-legislative power, i. e. regulatory power as to future rates; but there is no indication of any intention to clothe it with judicial or quasi-judicial powers with respect to past charges or practices, such as was vested in the Interstate Commerce Commission by section 9 of the Interstate Commerce Act. 49 USCA 9. As the Commission itself says, it was not given authority to fix rates for the past or to award reparations on account of past rates. If it was not given the power to fix past rates, or award reparations based upon their unreasonableness, it certainly was given no power to do the same thing indirectly by making findings of fact as to past rates to be given effect in rate proceedings before state commission. No intention on the part of Congress to vest any such unusual power in a commission ought to be indulged unless conferred in the plainest terms; and not only is it not plainly given here, but such power cannot be spelled out of the statutes on any theory of interpretation with which we are familiar.

Section 4 (a) of the Natural Gas Act, to which the Commission refers in its opinion, merely provides that rates shall be "just and reasonable" and declares unlawful a rate that is not "just and reasonable". Section 14 (a) provides for nothing except investigations by the Commission to determine whether or not the act is being violated. The only power with respect to fixing rates is that contained in section 5 (a) heretofore quoted, which is confined to prescribing rates for the future. Section 16, to which the Commission refers, merely clothes the Commission with power to perform all acts etc. necessary or appropriate to carry out the provisions of the Act. Certainly no power to make findings as to past rates is contained there. Section 5 (b) authorizes the Commission, upon its own motion or upon request of a state com-

mission, to investigate and determine the cost of production or transportation of natural gas, not to fix past rates or to do the same thing indirectly by determining that amounts collected in the past exceeded reasonable rates. Section 17 does no more than authorize the Commission to refer any matter arising in the administration of the act to a board, members of which are to be nominated by state commissions, and to authorize the Commission to confer with state commissions and hold joint hearings with them in connection with any matter "with respect to which the Commission is authorized to act", and to authorize the Commission, in the administration of the act, to avail itself of the cooperation, services etc. of state commissions.

In none of these sections is any power granted to make findings as to reasonableness of past rates "as an aid to state regulation"; and in all of them taken together and construed in the light most favorable to the existence of the power, there is no indication of any intention on the part of Congress to grant such power. We cannot escape the conclusion that, if it had been the intent of Congress to grant unusual power of this sort, it would have said so plainly. Instead of saying so, however, Congress clearly limited the power of the Commission to that of fixing rates for the future by the following provision of section 5 (a): "The Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract *to be thereafter observed and in force*, and shall fix the same by order". [Italics supplied.] It is to be noted that in the passage of the Public Utility Act of 1935, upon which the Natural Gas Act is modeled, provisions giving the Commission power to investigate single rates and issue reparation orders, originally incorporated in the bill, were stricken out, the Senate Committee saying in its report: "They are appropriate sections for a state utility law, but the committee does not consider them applicable to one governing merely wholesale transactions". The Commission may not by administrative interpretation of the act thus clothe itself with a power denied it by Congress. As was said by Mr. Chief Justice Groner in Chenery Corp. v. Securities and Exchange Com'n D. C. App. 128 F. 2d 303, 311:

"In expressing this opinion, we are not saying that the Commission's view is not directed to a desirable end. As to that, opinions of men of experience and probity and judgment will differ widely. But, if the Commission's objective is to be attained, it should be only after the pros and cons have been carefully weighed in their relation, respectively, to the dangers and the benefits, and the scales should be controlled by Congress and not by the Commission. In short, all that we hold is that this vital question of policy is one for the Congress and not for the Commission."

When rates were filed with the Commission pursuant to section 4 (c) of the Act they became the only lawful rates which the utility could charge or accept. Cf. L. & N. R. Co. v. Maxwell 237 U. S. 94. Until changed by the Commission under the power granted pursuant to section 5 (a) they were binding alike upon the company and its customers; and, in the absence of a provision for award of reparation, there could be no occasion for a determination of their reasonableness except as reason for changing them in an order prescribing rates for the future. The suggestion in the Commission's brief that exercise of power as to past rates is necessary to obviate injustices resulting from delay in rate proceedings lacks force in view of the provision of the statute for the entry of interim orders. Sec. 16. Cf. Federal Power Com'n v. Natural Gas Pipeline Co. 315 U. S. 575, 583.

As a step in the process of fixing rates for the future, it was of course proper for the Commission to make findings with respect to the conditions and rates of the past, and we shall construe the findings as made pursuant to that power, and as subject to review like other findings made in support of the order. When so considered, they are invalidated by the same errors that vitiate the findings upon which the order fixing rates for the future is directly based.

It is argued that we are without power to review the findings as to past rates because no order is based thereon; but, as stated above, they are reviewable because made as a step in the proceeding to fix rates for the future. If, however, they be considered separate and apart from this and it be thought, contrary to our view, that the Commission has power to make such findings as to past rates "as an aid to state regulations", we think, nevertheless, that there can be no question as to their being reviewable under the statute. Such determination in that case would be, in effect, an order of the Commission affecting substantial rights and contractual relationships of a party to a proceeding before it and would be reviewable as such, whatever it might be called. Columbia Broadcasting System v. United States 316 U. S. 407; Rochester Telephone Corp. v. United States 307 U. S. 125. As said by Mr. Chief Justice Stone in the Columbia Broadcasting case, supra, with respect to whether particular action by the Commission constituted a reviewable order: "The particular label placed upon it by the Commission is not necessarily conclusive, for it is the substance of what the Commission has purported to do and has done which is decisive. Powell v. United States 300 U. S. 276, 284–85; A. F. of L. v. Labor Board 308 U. S. 401, 408." And as said by Mr. Justice Frankfurter in his concurring opinion in that case: "If an administrative determination of status has the effect of subjecting a person to legal obligations, whether embodied in statute or previously formulated administrative commands, or otherwise affecting legal

rights, such a determination possesses the elements of a reviewable order." A finding by the Commission which determines that past rates are unlawful in a determined amount, and which is to be given effect by a state regulatory body in determining the reasonableness of rates charged on the basis thereof, certainly affects legal rights; and the power of review under the statute should be coextensive with the power of the Commission to make such determination.

In any view of the matter, therefore, the findings as to past rates are reviewable, and should be set aside for the reasons heretofore given in discussing valuation and depreciation. We are impressed, also, with the thought that the finding as to unreasonableness of these rates cannot be sustained because made on the basis of the utility's experience during the years in question, instead of upon a reasonable estimate of expense based upon experience of a prior period. The reasonableness of a rate must be judged in the light of information available at the time it is charged, not in the light of subsequent developments. It is manifestly impractical to conduct a wholesale natural gas business on the basis of annual changes in rates; and certainly it is unreasonable that rates be condemned retroactively on the basis of facts which could not have been known when they were charged.

For the reasons stated, the order of the Commission will be set aside and the cause will be remanded for further proceedings.

Reversed and Remanded.

DOBIE, Circuit Judge, dissenting:

I regret that I must dissent from the majority opinion. The importance of this case, and the wide interest in the vital questions involved, prompt me to set out, very briefly, the reasons for my dissent.

Under the majority opinion, the decision of the Federal Power Commission is reversed on three principal grounds: (1) The adoption by the Commission of the Prudent Investment Theory in fixing the rate-base; (2) The use by the Commission of the Economic Service Life Method in arriving at depreciation; (3) The refusal by the Commission to allow as capital outlay the well-drilling costs which Hope had previously charged to operating expenses.

(1) The Prudent Investment Theory.

The Commission, in arriving at the proper rate-base, frankly and openly adopted the Prudent Investment Theory and paid no attention to the present value of the properties of Hope. Mr. Justice Brandeis, in his classic concurring opinion (Mr. Justice Holmes joined in the opinion) in State of Missouri ex rel. South-

western Bell Telephone Co. v. Public Service Commission of Missouri, 262 U. S. 276, has set forth, with his customary incisive clarity, the Prudent Investment Theory, together with the reasons for his belief in that theory. To my mind, the arguments he therein advances have never been convincingly refuted.

Nearly twenty years have slipped by since that opinion was handed down. During this period, the pronouncements of the United States Supreme Court in this field have been many, varied and quite confusing. This fact has been pointed out by writers whose names are thrice legion. The recent case (involving the Natural Gas Act, with which we are also concerned) of Federal Power Commission v. Natural Gas Pipeline Co., 315 U. S. 575, however, does call for some comment.

The majority opinion in that case (written by Chief Justice Stone) contains no express discussion of the Prudent Investment Theory and certainly does not in precise terms sanction the use of that theory alone. Interesting, though, in this connection is the oft-quoted statement of Chief Justice Stone (315 U. S. at page 586):

"The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. If the Commission's order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end."

But the concurring opinion of Justices Black, Douglas and Murphy, on the specific point under discussion, is as clear as crystal and as crisp as bacon; for this opinion flatly and squarely upholds the validity of the application of the Prudent Investment Theory, to the exclusion of any other theory (315 U. S. at page 606) in three sentences so free from ambiguity that they cannot be misunderstood:

"As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or giving any weight to that element of 'fair value'. The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the *South western Bell Telephone* case, there *could be no constitutional ob-*

*jection if the Commission adhered to that formula and rejected all others.*" [Italics ours.]

It is difficult for me to believe that the majority of the Supreme Court, believing otherwise, would leave such a statement unchallenged.

A careful study of the Natural Gas Act (particularly the precise wording of Section 6) convinces me that Congress intended to give to the Federal Power Commission a wider latitude and a more extended discretion than had been given to any other federal board or commission under any previous statute in the field of rate making.

Further, I think that the methods adopted by the Commission under the Prudent Investment Theory, in arriving at a rate-base in the instant case, were neither fanciful nor arbitrary. It seems to me, too, that there was substantial evidence to support the opposite findings of the Commission.

Accordingly, I see here no adequate reasons for reversing on this score the decision and findings of the Commission.

(2) The Economic Life Service Method of Computing Depreciation.

In computing depreciation and depletion, the Commission employed the Economic Life Service Method. This formula has long been known to, and has been frequently applied by, economists and accountants. It seems to have been often used in connection with depreciation under the federal income tax. I cannot find in this formula any active germs of constitutional invalidity, as it is applied to the instant case.

The Commission based its determination of existing depletion and depreciation upon actual legitimate cost of the properties of Hope. An apparently competent engineer inspected this property to obtain information that would serve as a guide for estimating the property's service life and the amount of money required annually to reimburse Hope for so much of this property as might be consumed in rendering service to the public.

Incidentally, the amount deducted by the Commission fell short by many millions of dollars of the amount accrued and set up by Hope for depreciation and depletion. In his partially dissenting opinion Commissioner Scott expressed the view that the Commission had been, in fixing the amount for depreciation and depletion, far too lenient with Hope.

Again I feel that there was substantial evidence to sustain the Commission's findings under a formula which was neither unrealistic nor capricious.

(3) Disregard of Drilling Costs Charged by Hope to Operating Expenses.

The Commission refused to allow as capital the amount of drilling cost which Hope had in the past charged to operating expenses. The Commission found (and I think this finding is supported by the evidence) that these costs had been considered by Hope in fixing its rates in previous years and that these costs had already been paid by the consumers. On this ground, the Commission declined to include these costs in arriving at the rate-base.

It was the practice of Hope, prior to 1923, to charge well-drilling costs to operating expenses rather than to capital account. In so doing, Hope seems to have followed the then general procedure of the natural gas industry. It changed this practice under a requirement of the Public Service Commission of West Virginia. The present system of accounting prescribed by the Federal Power Commission also follows the West Virginia practice. It is my considered opinion that the present procedure is the proper one.

It is to be noted that this is not a mere mathematical error in book-keeping, which of course, should be corrected. It is rather an accounting policy. It does not seem to me to be vital whether the decision of the Commission here is based upon technical estoppel, equity or fair dealing. And once more, I think the Commission should be here sustained. Under its present claim, Hope seeks to impeach its books, which were competently kept for a long period of years under the older method. And Hope itself, in a previous rate case before the Public Service Commission of West Virginia, claimed these well-drilling costs as operating expenses, its contention was allowed, and its rates were fixed accordingly.

The holding of the Commission here is sustained by the great weight of authority. In the Commission's brief, these authorities are set out at great length, and include decisions of federal courts, decisions of state courts, and decisions of State Utility Commissions. Quite striking here, I think, is an extract from the majority opinion in the recent Natural Pipe Line case (315 U. S. at pages 590, 591):

"Here the companies, though unregulated, always treated their entire original investment, together with subsequent additions, as capital on which profit was to be earned. They charged the out-of-pocket cost of maintenance of plant, whether used to capacity or not, as operating expenses deductible from earnings before arriving at net profits. *They have thus treated the items now sought to be capitalized in the rate base as operating expenses to be compensated from earnings, as in the case of regulated companies.* * * * *We cannot say that the Commission has deprived the companies of their property by refusing to permit them to earn for the future a fair return and amortization on the costs of maintenance of initial excess capacity—costs which the companies fail to show have not already been recouped from earnings before com-*

*puting the substantial 'net profits' earned during the first seven years.*" [Italics ours.]

For the reasons stated, I think the decision and findings of the Commission should be affirmed.

United States Circuit Court of Appeals, Fourth Circuit

No. 4979

HOPE NATURAL GAS COMPANY, PETITIONER

*vs.*

FEDERAL POWER COMMISSION, CITY OF CLEVELAND, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, RESPONDENTS.

On Petition for Review of Orders of the Federal Power Commission

*Decree*

Filed and Entered February 16, 1943

This cause came on to be heard upon the petition of the Hope Natural Gas Company to review and set aside certain orders issued against it by the Federal Power Commission on the 26th day of May, 1942, in proceedings before said Federal Power Commission numbered G-100, G-101, G-113 and G-127, entitled "City of Cleveland, Complainant, vs. Hope Natural Gas Company, Defendant"; "City of Akron, Complainant, vs. Hope Natural Gas Company, Defendant"; "In the Matter of Hope Natural Gas Company", and "Pennsylvania Public Utility Commission, Complainant, vs. Hope Natural Gas Company, Defendant", respectively, and upon the transcript of record in said proceedings certified and filed in this Court; and the said cause was argued by counsel.

On consideration whereof, it is ordered, adjudged, and decreed by the United States Circuit Court of Appeals for the Fourth Circuit, that said orders of the Federal Power Commission in said proceedings be, and the same are hereby, set aside; and that this cause be, and the same is hereby, remanded to the said Federal Power Commission for further proceedings in accordance with the opinion of the Court filed herein.

JOHN J. PARKER,
*Senior Circuit Judge.*

MORRIS A. SOPER,
*U. S. Circuit Judge.*

I dissent. A. M. DOBIE, *U. S. Circuit Judge.*

[Endorsed:] "Filed and entered February 16, 1943. Claude M. Dean, Clerk, U. S. Circuit Court of Appeals, Fourth Circuit."

March 5, 1943, petition of the respondents for a stay of the mandate is filed.

*Order staying mandate pending application for a writ of certiorari*

Filed and entered March 8, 1943

(Style of court and title omitted)

Upon the application of the Respondents, by their counsel, and for good cause shown,

It is ordered that the mandate of this Court in the above entitled cause be, and the same is hereby, stayed pending the application of the said Respondents in the Supreme Court of the United States for a writ of certiorari to this Court, unless otherwise ordered by this or the said Supreme Court, and provided said application is filed in the said Supreme Court within 30 days from this date.

JOHN J. PARKER,
*Senior Circuit Judge.*

MARCH 8TH, 1943.

*Clerk's certificate*

UNITED STATES OF AMERICA,
*Fourth Circuit, ss:*

I, Claude M. Dean, Clerk of the United States Circuit Court of Appeals for the Fourth Circuit, do certify that the foregoing four (4) volumes is a true copy of the supplement to brief of petitioner; respondents' appendix, volume I (pleadings, orders, and oral testimony); respondents' appendix, volume II (exhibit book with explanatory statements), and the proceedings in the said Circuit Court of Appeals in the therein entitled cause, as the same remain upon the records and files of the said Circuit Court of Appeals, and constitute and is a true transcript of the record and proceedings in the said Circuit Court of Appeals in said cause, made up in accordance with the directions of the Solicitor General of the United States, for use in the Supreme Court of the United States on an application for a writ of certiorari.

In testimony whereof, I hereto set my hand and affix the seal of the said United States Circuit Court of Appeals for the Fourth Circuit, at Richmond, Virginia, this 13th day of March A. D. 1943.

[SEAL] CLAUDE M. DEAN, *Clerk,*
*U. S. Circuit Court of Appeals, Fourth Circuit.*

# SUPREME COURT OF THE UNITED STATES

No. 34, October Term, 1943

*Order allowing certiorari.—Filed May 17, 1943.*

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Fourth Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

SUPREME COURT OF THE UNITED STATES

No. 35, October Term, 1943

*Order allowing certiorari.—Filed May 17, 1943*

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Fourth Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

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# In the Supreme Court of the United States

OCTOBER TERM, 1942

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No. 890

FEDERAL POWER COMMISSION, CITY OF AKRON AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONERS

*v.*

HOPE NATURAL GAS COMPANY

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**PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT**

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The Solicitor General on behalf of the Federal Power Commission, the Director of Law on behalf of the City of Akron, and Commission Counsel on behalf of the Pennsylvania Public Utility Commission pray that a writ of certiorari issue to review the judgment of the United States Circuit Court of Appeals for the Fourth Circuit, entered on February 16, 1943, which set aside an order of the Federal Power Commission reducing the rates of respondent, Hope Natural Gas Company, and which set aside the Federal Power Commission's "Findings as to Lawfulness of Past Rates" charged by respondent.

## OPINIONS BELOW

The opinion of the Circuit Court of Appeals (R. IV, 169–207)[1] is not yet officially reported. The opinion of the Federal Power Commission is found at R. I, 1–89.

## JURISDICTION

The judgment of the Circuit Court of Appeals was entered on February 16, 1943 (R. IV, 207). The jurisdiction of this Court is invoked under Section 240 (a) of the Judicial Code, as amended by the Act of February 13, 1925, and Section 19 (b) of the Natural Gas Act.

## STATUTE INVOLVED

The pertinent provisions of the Natural Gas Act of 1938 (52 Stat. 821; 15 U.S.C. § 717) are set forth in Appendix A, *infra,* pp. 29–35.

## QUESTIONS PRESENTED

The Federal Power Commission, after complaints by the Cities of Cleveland and Akron and the Pennsylvania Public Utility Commission, and after extensive hearings, found that respondent's interstate rates were unreasonable and unlawful and issued an order reducing respondent's future rates by $3,609,857 annually. The Commission adopted a prudent investment rate base. The court below invoked the "present fair value"

[1] In the record citations, roman numerals refer to the volume, arabic numerals to the page.

theory to set aside the Commission's findings and order. The questions presented are:

1. Whether, for rate-making purposes under the Natural Gas Act, the Commission is authorized to use a rate base determined exclusively upon the basis of prudent investment, measured by "actual legitimate cost" less depreciation,[2] or whether it must use a rate base which reflects estimates of the extent and effect of post-investment fluctuations in labor and material prices.

2. Whether the Commission must include in "actual legitimate cost" amounts previously and correctly charged by respondent to operating expenses, in accordance with industry practice of the time, and determined by the Commission to have been recouped through revenues received from rate payers.

3. Whether the Commission may determine actual existing (accrued) depletion and depreciation, and the annual allowance in operating expenses for these factors, upon the basis of "actual legitimate cost", or whether the Commission must base such

[2] "Actual legitimate cost" (which Section 6 (a) of the Natural Gas Act authorizes the Commission to ascertain for natural-gas companies) less existing depreciation has been interpreted by the Commission to be "prudent investment." *Re Canadian River Gas Company*, 43 P. U. R. (N. S.) 205; *Detroit* v. *Panhandle Eastern Pipe Line Co.*, 45 P. U. R. (N. S.) 203; see *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 265.

determinations upon estimates of the "present fair value" of the property.

4. Whether the court below erred in holding that in determining the actual existing (accrued) depletion and depreciation, the Commission failed to take into account "the present condition of the property."

5. Whether the economic-service-life principle, as applied by the Commission in this case, is a reasonable method of determining the actual existing depletion and depreciation and the annual allowance therefor.

6. Whether the court below erred in holding that $165,963 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 operating expenses.

7. Whether the rates fixed by the Commission are just and reasonable in the statutory sense and nonconfiscatory in the constitutional sense.

8. Whether the Commission has jurisdiction to determine the *lawful* rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order.

9. Whether the court below erred in holding that the Commission's "findings as to past rates * * * should be set aside."

## STATEMENT

### THE RESPONDENT

Hope Natural Gas Company ("Hope"), a wholly owned subsidiary of the Standard Oil Company (New Jersey), is conceded to be a "natural-gas company" within the meaning of the Natural Gas Act (R. III, 19). Hope purchases and produces natural gas in West Virginia, transports it in pipe lines to the West Virginia-Ohio and West Virginia-Pennsylvania state lines, and there sells it in interstate commerce to its affiliates, East Ohio Gas Company and River Gas Company, for resale to ultimate consumers in Ohio; to its affiliate, Peoples Natural Gas Company, for resale to ultimate consumers in Pennsylvania; and to the nonaffiliated Manufacturers Light and Heat Company and Fayette County Gas Company for resale in Pennsylvania (R. I, 17). About 80% of Hope's total sales are in interstate commerce and 95% of such sales are to its aforementioned affiliates (R. I, 18). About 20% of Hope's total volume of gas is sold in intrastate commerce to local consumers in West Virginia. Hope has been purchasing, producing, transporting and selling natural gas for more than forty years. Hope's interstate sales in 1940 amounted to about 53,000,000 MCF, and its interstate gross revenues in that year amounted to $19,296,755 (R. I, 51).

## THE STATUTE

The Natural Gas Act (the "Act"), effective June 21, 1938, requires that all rates or charges in connection with the transportation or sale of natural gas subject to the Act be just and reasonable and declares any rate or charge that is not just and reasonable to be unlawful (Sec. 4 (a)). It provides that the Federal Power Commission (the "Commission"), upon complaint of any State, municipality, State commission, or gas distributing company, or upon its own motion, whenever it finds that any rate is unjust or unreasonable, shall determine the rate to be thereafter observed and in force, and shall fix the same by order; and, further, that the Commission "may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates" (Sec. 5 (a)). Any State, municipality, or State commission, complaining of anything done or omitted to be done by any natural gas company in contravention of the provisions of the Act, may file a complaint with the Commission (Sec. 13).

Under Section 14 (a) the Commission may investigate any matter "to determine whether any person has violated or is about to violate any provision of this Act" and "make available to State commissions and municipalities, information concerning any such matter." Section 16 empowers the Commission to perform any and all acts it

may find necessary or appropriate to carry out the provisions of the Act. And Section 17 (c) requires the Commission to make available to the several State commissions "such information and reports as may be of assistance in State regulation of natural-gas companies."

THE PROCEEDINGS BEFORE THE COMMISSION

In July 1938, the Cities of Cleveland and Akron filed complaints with the Commission, charging that the rates collected by Hope from East Ohio Gas Company were excessive and unreasonable (R. II, 1, 7). In October 1938, the Commission, on its own motion, instituted an investigation to determine the reasonableness of all of Hope's interstate rates (R. II, 28). In March 1939, the Pennsylvania Public Utility Commission filed a complaint with the Commission, charging that the rates collected by Hope from Peoples Natural Gas Company, Manufacturers Light and Heat Company, and Fayette County Gas Company were unreasonable (R. II, 18). The City of Cleveland's complaint, as amended and modified, prayed specially for a determination by the Commission that Hope's collected rates from East Ohio were unreasonable and therefore unlawful, and for a determination of just and reasonable Hope-East Ohio rates from June 30, 1939, to the date of the Commission's decision, requesting such determinations "in the aid of State regula-

tion" and particularly to afford the Public Utilities Commission of Ohio a proper basis for disposition of a fund collected by East Ohio under bond from Cleveland consumers during the period since June 30, 1939 (R. II, 14).[3] In October 1939, the Federal Power Commission consolidated the three complaint cases and its own investigation of Hope's interstate wholesale rates for hearing (R. II, 34). Hearings were held in 1940[4] and 1941, and after briefs were filed, the

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[3] The fund represents the difference between East Ohio's previous rates and the lower rates established by ordinance of the City of Cleveland, which East Ohio is collecting pending its appeal from the ordinance to the Public Utility Commission of Ohio, under §§ 614–44 *et seq.* of the Ohio General Code. See *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, No. 87, October Term, 1942, decided January 11, 1943, slip sheet, p. 5.

Representing that the Ohio Commission's determination of the reasonableness of the retail rate established by the City of Cleveland for sales by East Ohio to Cleveland consumers, for the years in which the fund was accumulated, "was ultimately dependent upon the lawfulness" of Hope's charge to East Ohio (R. II, 45), the City in its amended complaint of January 6, 1939, requested the Power Commission to determine the lawful wholesale rates from and after June 21, 1938, to the effective date of its order fixing Hope's rates. In a brief subsequently filed before the Power Commission, it limited the request to cover rates charged from and after June 30, 1939, for the reason that a settlement had made the question moot with respect to the earlier period originally covered.

[4] On December 20, 1940, the Commission denied without prejudice a motion of the Cities of Cleveland and Akron for an immediate order reducing the Hope-East Ohio rate upon Hope's own testimony, for the reason that "there is

case was argued orally before the Commission sitting *en banc* on October 27, 1941 (R. II, 48). The Commission decided the case on May 26, 1942, when it entered an "Order Reducing Rates" charged by Hope and, in addition, separate "Findings as to Lawfulness of Past Rates" collected by Hope from East Ohio (R. I, 1, 8).

### The Commission's Determinations

The Commission's "Order Reducing Rates" required Hope to reduce its interstate rates for the future to reflect a reduction of not less than $3,609,857 in operating revenues on an annual basis (R. I, 6). More particularly, the order required minimum reductions of 7 cents per MCF from the 36.5¢ and 35.5¢ rates previously charged East Ohio and Peoples Natural Gas, respectively, and 3 cents per MCF from the 31.5¢ rate previously charged Fayette County Gas and Manufacturers Light and Heat Company (R. I, 73–74). The Commission's "Findings as to Lawfulness of Past Rates", made in deciding the complaint of the City of Cleveland, determined that the rates collected by Hope from East Ohio were unjust, unreasonable, excessive, and therefore unlawful, by $830,892 in 1939, $3,219,551 during 1940, and

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insufficient evidence of record, at this time, to support the prayer for relief requested by the movants," and subject to the reservation that "this order is not to be construed as a determination of any of the issues in the pending principal proceedings" (R. II, 43).

$2,815,789 on an annual basis since 1940; and further determined just and reasonable rates for gas sold to East Ohio for resale for ultimate public consumption to be $11,528,608 for 1939, $11,507,185 for 1940, and $11,910,947 on an annual basis for 1941 and the first half of 1942 (R. I, 12–13).

The Commission founded its "Order Reducing Rates" upon a rate base of $33,712,526, upon which it granted respondent a 6½% rate of return, or $2,191,314 annually (R. I, 4). This rate base was determined to be the actual legitimate cost of Hope's interstate property less existing depletion and depreciation, plus allowances for unoperated acreage, working capital, and future net capital additions (R. I, 50).

The Commission's rate base was arrived at substantially as follows: The Commission found that Hope had kept complete documentary evidence, through books, records and vouchers, of its expenditures throughout its existence, so that no estimates were required to ascertain the actual legitimate cost (R. I, 23, 174). Pursuant to a check of the inventory of Hope's property in service, and pursuant to an examination, analysis, and audit of respondent's records, the Commission determined the cost to be $52,174,873 for the property devoted to the interstate sales, as of December 31, 1940 (R. I, 34–36; R. III, 25–32, 69, 287). From this amount, the Commission then deducted accrued depletion and depreciation, which it found

to be $22,328,016 (R. I, 45, 50).[5] It arrived at this figure by applying the economic-service-life method to actual legitimate cost (R. I, 41). In making these determinations the Commission was guided by a study conducted by a qualified staff engineer, who made a field inspection of the Company's physical properties to aid in the determination of service lives (R. I, 42; III, 158). The Commission then added $1,392,021 for future net capital additions, $566,105 for useful unoperated acreage, and $2,125,000 for working capital, yielding the total rate base of $33,712,526 (R. I, 50).

Using 1940 as a test year to forecast future revenues, and forecasting expenses at the 1940 figure plus $421,169, the Commission allowed respondent operating expenses and taxes amounting to $13,495,584 (R. I, 62, 70, 72). Of this total $1,460,037 represented the annual allowance for depreciation and depletion (R. I, 53). This allowance was determined by the Commission in the same way as the actual existing depreciation and depletion, by the application of the economic-

[5] The actual existing depletion and depreciation found by the Commission came to about $24,000,000 less than the depletion and depreciation which the Company had accrued on its books (R. I, 81). One of the Commissioners dissented on the ground that the Commission should have deducted accrued depreciation and depletion of not less than $38,000,000, the reserve remaining on the Company's books after it had transferred $7,500,000 from the reserve to surplus (R. I, 81).

service-life method to the actual legitimate cost of respondent's properties (R. I, 51–52).

The Commission's "Findings as to Lawfulness of Past Rates" were arrived at on the same principles and in substantially the same manner as the "Order Reducing Rates," except that they were based on actual operating experience for the years in question, instead of a test year (R. I, 11).

In issuing its order and findings the Commission rejected respondent's argument that post-investment changes in price levels had to be reflected in the rate base and in computing both accrued depreciation and depletion and the annual allowance in operating expenses for these items (R. I, 20–23, 36, 41, 52). It condemned as hypothetical and without probative value the "reproduction cost new" and "trended original cost" estimates (amounting to approximately $97,000,000 and $105,000,000, respectively) submitted in evidence by respondent in support of its claimed rate base of some $66,000,000 (R. I, 20–23). The Commission also rejected respondent's contention that, in any event, the rate base should have reflected an additional sum of about $17,000,000, representing largely expenditures for well drilling prior to 1923, which respondent had charged to operating expenses (R. I, 24–34). Likewise unsuccessful was respondent's espousal of the "percent condition" theory of measuring accrued depreciation (R. I, 38).

Pursuant to Section 19 of the Act, Hope filed an application for rehearing (R. II, 51), and upon denial petitioned the United States Circuit Court of Appeals for the Fourth Circuit for a review of the Commission's "Order Reducing Rates" and the Commission's "Findings as to Lawfulness of Past Rates" (R. IV, 3).[6]

## The Opinion Below

On review, the court below, with one judge dissenting, set aside the Commission's "Order Reducing Rates" on the basic grounds that: (1) the Commission's use of a prudent investment rate base failed to reflect "present fair value", in view of the post-investment "decided change" in price levels shown by the record and by judicially noticeable facts (R. IV, 172, 183–184); (2) the Commission erroneously excluded from the rate base the well-drilling costs previously incurred and charged to operating expenses prior to 1923. (R. IV, 172, 184–189); (3) the Commission improperly determined accrued depreciation on the basis of "theoretical formulas", without considering the present physical condition of respondent's property (R. IV, 172, 189–190); (4) the Commis-

[6] Hope did not seek a stay of the Commission's order from the Circuit Court of Appeals and such order has not been stayed; instead Hope agreed with its customer companies to charge the ordered rates pending litigation, upon the customers' agreement to make Hope whole if the Commission's order should be finally invalidated.

sion should have based its annual allowance in operating expenses for depreciation and depletion upon the "present fair value" of the physical property, instead of upon actual legitimate cost (R. IV, 192–198); (5) the Commission should have included in 1940 operating expenses $165,963 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941 (R. IV, 198); (6) the Commission should have made an annual allowance for depreciation and depletion on capital added to the rate base after 1940 (R. IV, 196).

The court also set aside the Commission's "Findings as to Lawfulness of Past Rates", holding that: (1) the Commission had no jurisdiction to make findings as to lawfulness of past rates "to be given effect in rate proceedings before state commissions", and that rates filed with the Commission under Section 4 (c) of the Act became the only "lawful" ones which the utility could charge or accept until changed by the Commission; (2) the Commission could investigate "the conditions and rates of the past" as an incident of its power to fix future rates, but that so viewed the findings in question were invalid for the same reasons as its "Order Reducing Rates", and were also objectionable in that they were based on actual experience for the years in question, rather than reasonable estimates of ex-

pense based on experience during a prior period (R. IV, 200, 202).[7]

**REASONS FOR GRANTING THE WRIT**

This case is one of great public significance. The vital issue underlying the main questions presented is whether the Federal Power Commission may employ the prudent investment method of rate-making. The decision of these questions is of first importance not only in the adminstration of the Natural Gas Act of 1938,[8] but in the general

[7] On March 8, 1943, the Circuit Court of Appeals granted a motion for the stay of its mandate pending further order, upon the condition that a petition for writ of certiorari be filed with the Supreme Court of the United States within thirty days (R. 209).

[8] Four Power Commission cases involving gas companies, with prudent investment rate bases aggregating $87,000,000, are now pending in the Eighth and Tenth Circuit Courts of Appeals. *Panhandle Eastern Pipe Line Co.* v. *Federal Power Commission*, No. 12466 (C. C. A. 8th); *Colorado Interstate Gas Co.* v. *Federal Power Commission*, No. 2550 (C. C. A. 10th); *Canadian River Gas Co.* v. *Federal Power Commission*, No. 2551 (C. C. A. 10th); *Colorado-Wyoming Gas Co.* v. *Federal Power Commission*, No. 2561 (C. C. A. 10th).

The $3,750,000 interim rate reduction approved in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, was followed by a final consent rate reduction of an additional $2,750,000 and was based solely on prudent investment. F. P. C. Order Accepting Reduced Rates For Filing And Terminating Proceedings, September 19, 1942. Additional consent reductions in natural gas rates were obtained by the Commission's insistence upon prudent investment rate bases in the following cases: *Lone Star Gas Co.*, F. P. C. Docket Nos. G-208, G-209, May 4, 1942. Order Re-

field of public rate regulation—to every rate-making body throughout the nation, to the public utilities regulated, and to the countless consumers of public utility services. In passing upon these questions the court below divided, being unable to agree upon the proper meaning, and application to the facts at bar, of this Court's recent decision in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, which arose under the same statute. The correct meaning and application of that decision are matters which only this Court can finally resolve, and which in the public interest should be resolved. Moreover, in our view the decision of the majority of the court below on several of the basic questions presented is in conflict with decisions of this Court.

(1) The Commission's "Order Reducing Rates" was upset below on the fundamental ground that both the Constitution and the Natural Gas Act command the Commission to adopt a rate base which reflects "present fair value" by giving effect to post-investment fluctuations in price levels, and accordingly that the Commission lacks

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ducing Rates by $2,053,564 per year; *El Paso Natural Gas Co.*, F. P. C. Docket Nos. G-242, G-257, October 29, 1942, Order Reducing Rates by $526,000 per year; *Northern Natural Gas Co.*, February 4, 1943, Order Making Effective Reductions In Rates by $2,087,000 per year.

There are now pending before the Power Commission rate cases involving companies with properties showing investment per books of about $574,000,000 and whose annual revenues total $110,000,000.

authority to use a rate base representing actual legitimate cost less depreciation (i. e., prudent investment), except where such base also reflects "present fair value" (R. IV, 183).[9]

The net effect of the decision below, in both its constitutional and statutory aspects, is to confine the Commission's freedom to use prudent investment to cases in which its application would yield a rate base equivalent in general to that which would be derived under theories founded on the eminent-domain concept of present value, such as "reproduction cost new" and "trended original cost."[10] But, from the standpoint of sound economic, accounting, and legal principles alike, there is grave doubt whether eminent-domain concepts of present value have any proper place in public-utility rate making. See Brief for the Federal Power Commission and Illinois Commerce Commission, Nos. 265 and 268, October

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[9] The dissenting judge, on the other hand, construed this Court's decision in the *Pipeline* case to hold that there was no constitutional objection to the Commission's exclusive use of the prudent investment method and concluded that the Commission's order was within the scope of its statutory authority, reasonable, and supported by substantial evidence (R. IV, 203-205).

[10] The substantial identity of the "reproduction cost new" and "trended original cost" theories is well illustrated by respondent's respective valuation estimates under each of those theories in the present case—$97,000,000 under the former and $105,000,000 under the latter. These estimates contrast sharply with the actual legitimate cost of $52,000,000 found by the Commission (R. I. 20-21, 36).

Term, 1941, p. 112, *et seq.* Much less should it be judicially enforced as the exclusive determinant of the constitutional validity of every exercise of the rate-making power, for "the Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas." *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586. The view of the majority below would restrict that freedom of choice by imposing the condition that the formula chosen in any case must yield a result generally equivalent to that which would be obtained under eminent-domain formulas. There is no reasonable basis for interpolating any such condition into the *Pipeline* opinion. As the Court there held, the limit of judicial inquiry in these cases is to determine whether "the Commission's order, as applied to the facts before it and viewed in its entirety, produces [an] arbitrary result." *Federal Power Commission* v. *Natural Pipeline Co.*, 315 U. S. 575, 586.[11]

[11] The *Pipeline* case forecloses the contention that a rate order founded upon a prudent investment rate base is arbitrary simply because a larger rate base would result from the adoption of a formula reflecting prevailing price levels. For example, the decision there sustained the use of an amortization base reflecting actual legitimate cost regardless of the fact that another basis of determination, taking into account post-investment fluctuations in price levels, would have yielded a larger sum. It is immaterial whether the question concerns the propriety of using actual legitimate cost in determining the rate base or in determining the

The decision below is equally inadmissible upon statutory grounds. If, as this Court held in the *Pipeline* case, the Commission is authorized under the Natural Gas Act to use actual legitimate cost to determine the amortization base, it is equally authorized to do so in determining the rate base. The one is no more integral in the rate-making process than the other (*cf. Lindheimer* v. *Illinois Tel. Co.*, 292 U. S. 151, 164), and nothing in the statute suggests that a different result was intended. See Sections 5 (a) and 6. Indeed, as the dissenting judge below concluded, the statute grants the Commission a very broad discretion with respect to its rate-making powers within its jurisdictional sphere (R. IV, 205).

(2) The majority below incorrectly held that $17,000,000, largely representing well-drilling costs incurred prior to 1923[12] and charged by re-

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amortization base; the principles involved are the same and in terms of the ultimate issue, namely, the rates which the utility is entitled to charge, the answer is of comparable importance. *Cf. Lindheimer* v. *Illinois Tel. Co.*, 292 U. S. 151, 164–170.

[12] The $17,000,000 figure is before depreciation. After depreciation it amounts to about $4,000,000, as the court below noted (R. IV, 184).

Although the lower court's opinion suggests otherwise, not all of the $17,000,000 in question represented well-drilling costs which the Commission rejected because they had previously and properly been charged to operating expense. In particular, one item of $632,000 included in this aggregate figure, claimed as "interest during construction," was dis-

spondent to operating expenses, must now be capitalized and reflected in the rate base. This result was reached on the rationale that the items in question were "erroneously charged to expense" (R. IV, 189), instead of to capital, and that it was immaterial whether, as the Commission found, the cost of these items had been recouped in the form of revenues realized from rate payers because—

> * * * the customers paid for gas, not for the construction of wells, and * * * neither the cost of the wells nor the company's ownership thereof is affected by the fact that it may have paid for them with the proceeds of rates that were unreasonably high (R. IV, 186).

This reasoning embodies two fundamental errors. First, the items in question were not in fact "erroneously" charged to expense. As the Commission found in accordance with the evidence, until 1923[13] it was Hope's "consistent practice * * * to charge the cost of drilling wells to operating expense" (R. I, 27, 251–254; IV, 206); in so doing, Hope followed the general practice of the natural gas industry and "the well-

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allowed by the Commission on the ground that it was never incurred (R. I, 24, 180). The failure to notice this below was apparently an inadvertence.

[13] In 1923, the West Virginia Public Service Commission, pursuant to its jurisdiction over intrastate rates, required Hope to change this accounting practice for future well-drilling expenditures (R. I, 28).

established practice of extractive industries." a practice which was based upon the underlying theory "that additional wells were constantly needed to keep the Company in business, hence the cost incurred was not for the purpose of adding to the property but rather for the purpose of maintaining the business" (R. I, 27).

Secondly, in overriding the Commission's determination against capitalizing items previously and properly [14] treated as operating expense to be compensated from revenues received from rate payers, the prevailing judges below failed to give effect to prior decisions of this Court, *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 590–591; *R. R. Comm.* v. *Cumberland Tel. & Tel. Co.*, 212 U. S. 414, 424 *et seq.* The applicable rule was plainly stated in the *Pipeline* case as follows (315 U. S. 575, at 591):

> * * * They [the companies] have thus treated the items now sought to be capitalized in the rate base as operating expenses to be compensated from earnings, as in the case of regulated companies * * *.
>
> * * * * *
>
> We cannot say that the Commission has deprived the companies of their property by

[14] The Commission stressed the fact that the charge to operating expense was proper under the universal accounting practice prevailing in the industry at the time. It recognized that "genuine" accounting errors would probably warrant correction, and actually made such corrections where such errors were found in this case. See R. I, 31, 33, 35.

> refusing to permit them to earn for the future a fair return and amortization on the costs of maintenance of initial excess capacity—costs which the companies fail to show have not already been recouped from earnings before computing the substantial "net profits" earned during the first seven years.

This proposition is decisive here, since Hope has failed to show that the well-drilling costs "have not already been recouped from earnings."[15]

(3) The decision below erroneously condemned the Commission's application of the economic-service-life principle to determine actual existing (accrued) depreciation and depletion and the determinations based thereon. Conceding that the "formulas" which the Commission used were "undoubtedly important matters for it to take into consideration" (R. IV, 190), the court below rebuked the Commission for failing to consider, in addition, the "actual present conditions" of re-

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[15] Nor could respondent in good conscience make such a showing. For, as the Commission pointed out, Hope not only claimed and was allowed the expenditures in issue here as operating expenses when it successfully sought a rate increase in 1921 before the West Virginia Public Service Commission, but its "average rate of earnings on the annual average invested capital (capital stock and surplus) was more than 15%" between 1898 and 1923, the period when the well-drilling expenditures in question were made (R. I, 34; III, 13–14). See *Re Hope Natural Gas Co.*, P. U. R. 1921 F, 418, 433, 440.

spondent's properties, and for allegedly computing accrued depreciation solely on the basis of theoretical formulas (R. IV, 172, 190).

These objections ignore the fact specifically explained by the Commission and noted by the dissenting judge (R. IV, 205) that the determinations in question were based upon the testimony of "a properly qualified Staff engineer who * * * considered the functional and physical aspects of depreciation [and] as an aid in the determination of service lives * * * made a field inspection of the Company's physical properties" (R. I, 42; III, 158).[16] Moreover, the "formula" employed is the very economic-service-life principle which this Court has heretofore endorsed (R. I, 37). Cf. *Lindheimer* v. *Illinois Tel. Co.*, 292 U. S. 151, 167; *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 592–593.

(4) Relying on *United Railways* v. *West*, 280 U. S. 234, 253–254, the court below condemned the Commission's action in computing the annual allowance for depreciation and depletion upon the basis of actual legitimate cost. This holding runs counter to prior decisions of this Court. *Cf. Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 592–593; *Lindheimer* v.

[16] The result reached by the Commission is hardly arbitrary or confiscatory inasmuch as the amount it found came to some $24,000,000 less than the reserve accrued on respondent's books for depreciation and depletion.

*Illinois Tel. Co.*, 292 U. S. 151, 164, *et seq.*;[17] compare *United States* v. *Ludey*, 274 U. S. 295, 300–302.

The majority below sought to distinguish the *Pipeline* case in this connection on the ground that the Court there "dealt with * * * 'a wasting-asset business of limited life,'" rather than "an ordinary public utility which is required by law to continue its service to the public." (R. IV( 195.) But this ignores the controlling principles recognized in the *Pipeline* case. The mere absence here of an accord as to the time of exhaustion of respondent's gas reserves, present in the *Pipeline* case, should not endow respondent with a constitutional right to have its depreciation and depletion allowance computed upon a basis which will compel rate payers to return more than the amount invested. Regardless of the nature of respondent's business,[18] it suffices in reason and principle that the annual allowance provided by the Commission is based upon equitable determinations of the life of respondent's existing investment and

[17] Although the court below refused so to acknowledge, the *Lindheimer* opinion recognizes cost as a permissible basis of computing the depreciation allowance, and thus modifies the doctrine of the earlier *West* case, *supra*, that the allowance must reflect post-investment price advances. This was plainly recognized by Mr. Justice Butler, one of the majority in the *West* case, concurring specially in the *Lindheimer* case. *Lindheimer* v. *Illinois Tel. Co.*, 292 U. S. 151, at 176.

[18] The utility involved in the *Lindheimer* case, for example, was hardly "a wasting-asset business of limited life."

will reimburse respondent to the amount of that investment.

To insist, as did the court below, upon a present value yardstick for computing the annual allowance, on the theory that plant replacements will eventually have to be made, obscures realities. Present value at any given date has no predictable relation to future replacement cost (see Brandeis, J., dissenting in *United Railways* v. *West*, 280 U. S., 234 at 278) and is certainly no more reliable a test for this purpose than the cost basis adopted by the Commission. See Stone, J., dissenting, *id.*, at 289–291. On the other hand, actual replacement costs are reflected by the Commission's method. If replacements are in fact made at a cost higher than the original cost of the property retired, the actual legitimate cost will be correspondingly increased, as will the annual return and the annual allowance for depreciation and depletion. To use the cost basis is "the rule sanctioned by the universal practice of business men and governmental departments" (see Brandeis, J., dissenting, *id.*, at 275; and see Brief for the Federal Power Commission and Illinois Commerce Commission in Nos. 265 and 268, October Term, 1941, pp. 72–74). The Commission's adherence to regular business usage cannot reasonably be condemned as arbitrary or confiscatory.

(5) The court below erred in setting aside the Commission's "Findings as to Lawfulness of Past

Rates." The gist of the decision below in this aspect seemingly is that while the Commission, in fixing future rates, may examine into the reasonableness of past rates, its determination that they were unreasonable does not affect their past lawfulness. This anomalous result, besides depriving Section 4 (a) of any meaning, is incompatible with the purpose of the Act and with prior decisions of this Court. For if the Commission is without authority to determine lawful past rates, either rate payers will be subjected to the risk of being left without a forum in which to challenge the validity of interstate wholesale gas rates prevailing between the date of the Act's passage and the effective date of a Commission rate-fixing order. (*Cf. Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, No. 87, October Term, 1942, decided January 11, 1943; *Texas & Pac. Ry.* v. *Abilene Cotton Oil Co.*, 204 U. S. 426) or, if other forums might nevertheless be found to have jurisdiction over such issues, the way would be paved for inconsistent adjudications by a variety of tribunals—the very "confusion of functions" which the Act was designed to avoid (*United Fuel Gas* case, *supra*, slip sheet p. 8) and which this Court long ago condemned in the *Abilene* case, *supra* (204 U. S. at 440).[19]

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[19] Moreover the rationale underlying the lower court's conclusion in this regard is untenable. There is no warrant for contorting the Commission's lack of authority to award

Conversely, the recognition of the Commission's jurisdiction to determine what are lawful interstate wholesale rates dating back to the passage of the Act will effectuate the legislative objective of a "harmonious, dual system of regulation of the natural gas industry—federal and state regulatory bodies operating side by side * * *. See *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co., supra,* slip sheet p. 8.

To the extent that the substantive grounds for the lower court's rejection of the "Findings as to Lawfulness of Past Rates" are the same as those upon which is disapproved the "Order Reducing Rates," the considerations outlined in points 1 to 4, *supra,* are equally applicable. The independent substantive point raised in opposition to the findings, that the Commission erred in using actual experience to determine the reasonableness of past rates, is answered conclusively by *West Ohio Gas Co.* v. *Public Utilities Comm.,* 294 U. S. 79, 82.

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reparations into a proscription of its jurisdiction to inquire into the lawfulness of past rates. *Cf. Atlantic Coast Line R. Co.* v. *Florida,* 295 U. S. 301, 312; *United States* v. *Morgan,* 307 U. S. 183, 192. And the significance ascribed to the act of filing rates overlooks entirely the distinction drawn by this Court between "legal" and "lawful" rates. *Cf. Arizona Grocery Co.* v. *Atchison, Topeka & Santa Fe Ry. Co.,* 284 U. S. 370, 384.

## CONCLUSION

For the foregoing reasons it is respectfully submitted that the petition for a writ of certiorari should be granted.

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APRIL 1943.

## APPENDIX

The pertinent provisions of the Natural Gas Act of 1938, c. 556, 52 Stat. 821, *et seq.* (15 U. S. C. § 717) are as follows:

SEC. 4. (a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.

(b) No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.

(c) Under such rules and regulations as the Commission may prescribe, every natural-gas company shall file with the Commission, within such time (not less than sixty days from the date this Act takes effect) and in such form as the Commission may designate, and shall keep open in convenient form and place for public inspection, schedules showing all rates and

charges for any transportation or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.

* * * * *

SEC. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

* * * * *

SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate

cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

* * * * *

SEC. 9. (a) The Commission may, after hearing, require natural-gas companies to carry proper and adequate depreciation and amortization accounts in accordance with such rules, regulations, and forms of account as the Commission may prescribe. The Commission may from time to time ascertain and determine, and by order fix, the proper and adequate rates of depreciation and amortization of the several classes of property of each natural-gas company used or useful in the production, transportation, or sale of natural gas. Each natural-gas company shall conform its depreciation and amortization accounts to the rates so ascertained, determined, and fixed. * * *

* * * * *

SEC. 13. Any State, municipality, or State commission complaining of anything done or omitted to be done by any natural-gas company in contravention of the provisions of this Act may apply to the Commission by petition, which shall briefly state the facts, whereupon a statement of the complaint thus made shall be forwarded by the Commission to such natural-gas company, which shall be called upon to satisfy the complaint or to answer the same in writing within a reasonable time to be specified by the Commission.

SEC. 14. (a) The Commission may investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person has violated or is about to violate any provision of this Act, or any rule, regulation, or order thereunder, or to aid in the enforcement of the provisions of this Act or in prescribing rules or regulations thereunder, or in obtaining information to serve as a basis for recommending further legislation to the Congress. The Commission may permit any person to file with it a statement in writing, under oath or otherwise, as it shall determine, as to any or all facts and circumstances concerning a matter which may be the subject of investigation. The Commission, in its discretion, may publish in the manner authorized by section 312 of the Federal Power Act, and make available to State commissions and municipalities, information concerning any such matter.

* * * * * *

SEC. 16. The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this Act. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this Act; and may prescribe the form or forms of all statements, declarations, applications, and reports to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner

which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters. All rules and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours.

* * * * *

SEC. 17. (c) The Commission shall make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies. Whenever the Commission can do so without prejudice to the efficient and proper conduct of its affairs, it may, upon request from a State commission, make available to such State commission as witnesses any of its trained rate, valuation, or other experts, subject to reimbursement of the compensation and traveling expenses of such witnesses. All sums collected hereunder shall be credited to the appropriation from which the amounts were expended in carrying out the provisions of this subsection.

* * * * *

SEC. 19. (b) Any party to a proceeding under this Act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in

the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall

be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in while or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

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# In the Supreme Court of the United States

OCTOBER TERM, 1943

No. 34

FEDERAL POWER COMMISSION, CITY OF AKRON AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONERS

*v.*

HOPE NATURAL GAS COMPANY

*ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT*

## BRIEF FOR PETITIONERS

### OPINIONS BELOW

The opinion of the Circuit Court of Appeals is officially reported in 134 F. (2d) 287, and may be found at R. IV, 169–207.[1] The opinion of the Federal Power Commission is reported in 44 P. U. R. (N. S.) 1, and may be found at R. I, 1–89.

[1] In the record citations, roman numerals refer to the volume and arabic numerals to the page.

## JURISDICTION

The judgment of the Circuit Court of Appeals was entered on February 16, 1943 (R. IV, 207). The petition for a writ of certiorari was filed on April 6, 1943, and was granted on May 17, 1943. The jurisdiction of this Court is invoked under Section 240 (a) of the Judicial Code as amended by the Act of February 13, 1925 (28 U. S. C. § 347), and Section 19 (b) of the Natural Gas Act (15 U. S C. § 717r).

## STATUTE INVOLVED

The pertinent provisions of the Natural Gas Act (52 Stat. 821; 15 U. S. C. § 717) are set forth in Appendix A, pp. 124–135.

## QUESTIONS PRESENTED

The Federal Power Commission, acting pursuant to the Natural Gas Act, after complaints by the Cities of Cleveland and Akron and the Pennsylvania Public Utility Commission, and after extensive hearings, found that the interstate rates of Hope Natural Gas Company were unreasonable and unlawful and issued an order reducing the Company's future rates by $3,609,857 annually. The Federal Power Commission adopted a "prudent investment" rate base. The circuit court of appeals invoked the "present fair value" theory to set aside the Commission's findings and order. The questions presented are:

1. Whether, for rate-making purposes under the Natural Gas Act, the Commission is author-

ized to use a rate base determined exclusively upon the basis of prudent investment measured by "actual legitimate cost" less depreciation,[2] or whether it must use a rate base which reflects estimates of the extent and effect of post-investment fluctuations in labor and material prices.

2. Whether the Commission must include in "actual legitimate cost" amounts previously and correctly charged to operating expenses, in accordance with industry practice of the time, and determined by the Commission to have been recouped through revenues received from rate payers.

3. Whether the Commission may determine actual existing (accrued) depletion and depreciation and the annual allowance in operating expenses for these factors, upon the basis of "actual legitimate cost," or whether the Commission must base such determinations upon estimates of the "present fair value" of the property.

4. Whether the court below erred in holding that in determining the actual existing (accrued) depletion and depreciation, the Commission failed to take into account "the present condition of the property."

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[2] "Actual legitimate cost" (which Section 6 (a) of the Natural Gas Act authorizes the Commission to ascertain for natural-gas companies) less existing depreciation has been interpreted by the Commission to be "prudent investment." *Re Canadian River Gas Company*, 43 P. U. R. (N. S.) 205; *Detroit* v. *Panhandle Eastern Pipe Line Co.*, 45 P. U. R. (N. S.) 203; see *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263.

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5. Whether the "economic-service-life" principle, as applied by the Commission in this case, is a reasonable method of determining the actual existing depletion and depreciation and the annual allowance therefor.

6. Whether the court below erred in holding that $165,963 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 operating expenses.

7. Whether the rates fixed by the Commission are just and reasonable in the statutory sense and nonconfiscatory in the constitutional sense.

8. Whether the Commission has jurisdiction to determine the *lawful* rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order.

9. Whether the court below erred in holding that the Commission's "findings as to past rates * * * should be set aside."

## STATEMENT

### THE COMPANY

Hope Natural Gas Company ("Hope"), a wholly owned subsidiary of the Standard Oil Company (New Jersey), is conceded to be a "natural-gas company" within the meaning of the Natural Gas Act (R. III, 19). Hope purchases and produces natural gas in West Virginia, transports it in pipe lines to the West Virginia-Ohio

and West Virginia-Pennsylvania state lines, and there sells it in interstate commerce to its affiliates, East Ohio Gas Company and River Gas Company, for resale to ultimate consumers in Ohio; to its affiliate, Peoples Natural Gas Company, for resale to ultimate consumers in Pennsylvania; and to the nonaffiliated Manufacturers Light and Heat Company and Fayette County Gas Company for resale in Pennsylvania (R. I, 17). About 80% of Hope's total sales are in interstate commerce and 95% of such sales are to its aforementioned affiliates (R. I, 18). About 20% of Hope's total volume of gas is sold in intrastate commerce to local consumers in West Virginia. Hope has been purchasing, producing, transporting, and selling natural gas for more than forty years. Hope's interstate sales in 1940 amounted to about 53,000,000 MCF, and its interstate gross revenues in that year amounted to $19,296,755. (R. I, 51.)

Hope's only outstanding securities since its inception have been in the form of common stock, now having an aggregate par value of approximately $28,000,000. During the four decades of its operations, Hope has paid more than $108,000,000 in dividends, including $11,000,000 in stock dividends. The average annual yield on the average annual amount of Hope's capital stock issued for cash or other assets has exceeded 20%. (R. III, 15.) Hope's balance sheet at the end of 1938 showed a net investment, per books, in the entire

gas plant of approximately $15,500,000;[3] an investment in Government bonds of $11,000,000 and cash and investments of $5,500,000 (R. III, 21-24).

THE STATUTE

The Natural Gas Act, effective June 21, 1938 (the "Act"), requires that all rates or charges by natural-gas companies in connection with the transportation or sale of natural gas subject to the Act be just and reasonable, and declares any rate or charge that is not just and reasonable to be unlawful (Sec. 4 (a)). It provides that the Federal Power Commission, upon complaint of any State, municipality, State commission, or gas distributing company, or upon its own motion, whenever it finds that any rate is unjust or unreasonable, shall determine the rate to be thereafter observed and in force, and shall fix the same by order; and, further, that the Power Commission "may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates" (Sec. 5 (a)). Any State, municipality or State commission may file a complaint with the Power Commission, complaining of anything done or omitted to be done by any natural-gas

[3] Prior to 1938 Hope had transferred $7,500,000 from the depletion and depreciation reserves to earned surplus (R. I, 19, Ex. 61; R. III, 176–179). An adjustment to account for that transfer would reduce the $15,500,000 net investment per books shown as of 1938 to about $8,000,000.

company in contravention of the provisions of the Act (Sec. 13).

Under Section 14 (a) the Power Commission may investigate any matter "to determine whether any person has violated or is about to violate any provision of this Act" and may "make available to State commissions and municipalities, information concerning any such matter". Section 16 authorizes the Power Commission to perform any and all acts it may find necessary or appropriate to carry out the provisions of the Act. And Section 17 (c) requires the Power Commission to make available to the several State commissions "such information and reports as may be of assistance in State regulation of natural-gas companies".

PROCEEDINGS BEFORE THE COMMISSION

In July 1938, the Cities of Cleveland and Akron filed complaints with the Power Commission charging that the rates collected by Hope from East Ohio Gas Company ("East Ohio") were excessive and unreasonable (R. II, 1, 7). In October 1938, the Power Commission, on its own motion, instituted an investigation to determine the reasonableness of all of Hope's interstate rates (R. II, 28). In March 1939, the Pennsylvania Public Utility Commission filed a complaint with the Power Commission, charging that the rates collected by Hope from Peoples Natural Gas Com-

pany, Manufacturers Light and Heat Company, and Fayette County Gas Company were unreasonable (R. II, 18). The City of Cleveland's complaint, as amended and modified, prayed specially for a determination by the Power Commission that Hope's collected rates from East Ohio were unreasonable and therefore unlawful, and for a determination of just and reasonable Hope-East Ohio rates from June 30, 1939, to the date of the Power Commission's decision, requesting such determinations "in the aid of State regulation" and particularly to afford the Public Utilities Commission of Ohio a proper basis for disposition of a fund collected by East Ohio under bond from Cleveland consumers during the period since June 30, 1939 (R. II, 14).[4]

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[4] The fund represents the difference between East Ohio's previous rates and the lower rates established by ordinance of the City of Cleveland, which East Ohio is collecting pending its appeal from the ordinance to the Public Utilities Commission of Ohio, under §§ 614–644 *et seq.* of the Ohio General Code. See *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, 317 U. S. 456, 463.

Representing that the Ohio Commission's determination of the reasonableness of the retail rate established by the City of Cleveland for sales by East Ohio to Cleveland consumers, for the years in which the fund was accumulated, "was ultimately dependent upon the lawfulness" of Hope's wholesale charge to East Ohio (R. II, 45), the City in its amended complaint of January 6, 1939, had requested the Power Commission to determine the lawful wholesale rates from and after June 21, 1938, to the effective date of its order fixing Hope's rates. In a brief subsequently filed before the Power Commission, the City limited the request to cover rates

In October 1939, the Power Commission consolidated for hearing the three complaint cases and its own investigation of Hope's interstate wholesale rates (R. II, 34). Hearings were held in 1940[3] and 1941, and after briefs were filed, the case was argued orally before the Power Commission sitting *en banc* on October 27, 1941 (R. II, 48). The Commission decided the case on May 26, 1942, when it entered an "Order Reducing Rates" charged by Hope and, in addition, separate "Findings as to Lawfulness of Past Rates" collected by Hope from East Ohio (R. I, 1, 8).

THE COMMISSION'S DETERMINATIONS

The Commission's "Order Reducing Rates" required Hope to reduce its interstate rates for the future to reflect a reduction of not less than $3,609,857 in operating revenues on an annual basis (R. I, 6). More particularly, the order re-

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charged from and after June 30, 1939, for the reason that a settlement had made the question moot with respect to the earlier period originally covered.

[3] On December 20, 1940, the Power Commission denied without prejudice a motion of the Cities of Cleveland and Akron for an immediate order reducing the Hope-East Ohio rates upon Hope's own testimony, for the reason that "there is insufficient evidence of record, at this time, to support the prayer for relief requested by the movants," and subject to the reservation that "this order is not to be construed as a determination of any of the issues in the pending principal proceedings" (R. II, 43).

quired minimum reductions of 7 cents per MCF from the 36.5¢ and 35.5¢ rates previously charged East Ohio and Peoples Natural Gas Company, respectively, and 3 cents per MCF from the 31.5¢ rate previously charged Fayette County Gas Company and Manufacturers Light and Heat Company (R. I, 73–74). The Commission's "Findings as to Lawfulness of Past Rates", made in deciding the complaint of the City of Cleveland, determined that the rates collected by Hope from East Ohio were unjust, unreasonable, excessive, and therefore unlawful, by $830,892 in 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940; and further determined just and reasonable rates for gas sold to East Ohio for resale for ultimate public consumption to be $11,528,608 for 1939, $11,507,185 for 1940, and $11,910,947 on an annual basis for 1941 and the first half of 1942 (R. I, 12–13).

The Commission founded its "Order Reducing Rates" upon a rate base of $33,712,526, upon which it granted Hope a 6½% rate of return, or $2,191,314 annually (R. I, 4). This rate base was determined to be the actual legitimate cost of Hope's interstate property less existing depletion and depreciation, plus allowances for unoperated acreage, working capital, and future net capital additions (R. I, 50).

The Commission's rate base was arrived at substantially as follows: The Commission found

that Hope had kept complete documentary evidence, through books, records, and vouchers, of its expenditures throughout its existence, so that no estimates were required to ascertain the actual legitimate cost of its property (R. I, 23, 174). Pursuant to a check of the inventory of Hope's property in service, and pursuant to an examination, analysis, and audit of Hope's records, the Commission determined the cost to be $51,937,416 as of December 31, 1940, for the property devoted to interstate sales (R. I, 3, 50). From this amount, the Commission deducted accrued depletion and depreciation, which it found to be $22,328,016 (R. I, 4, 45, 50).[8] It arrived at this figure by applying the "economic-service-life" method to actual legitimate cost (R. I, 41). In making these determinations the Commission was guided by a study conducted by a qualified staff engineer, who made a field inspection of Hope's physical properties to aid in the determination of service lives (R. I, 42; R. III, 158). To the cost, less accrued depletion and appreciation, the Commission then

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[8] The actual existing depletion and depreciation found by the Commission came to about $24,000,000 *less* than the depletion and depreciation of some $46,000,000 which the Company had accrued on its books (R. I, 81). One of the Commissioners dissented on the ground that the Commission should have deducted from actual legitimate cost, accrued depreciation and depletion of not less than $38,000,000, the reserve remaining on the Company's books after it had transferred $7,500,000 from that reserve to surplus (R. I, 81). See n. 3, p. 6, *supra*.

added $1,392,021 for future net capital additions, $566,105 for useful unoperated acreage, and $2,125,000 for working capital, yielding the total rate base of $33,712,526 (R. I, 50).

Using 1940 as a test year to forecast future revenues, and forecasting expenses at the 1940 figure plus $421,160, the Commission allowed Hope operating expenses and taxes amounting to $13,495,584 (R. I, 5, 65). Of this total $1,460,037 represented the annual allowance for depreciation and depletion (R. I, 53, 65). This allowance was determined by the Commission in the same way as the actual existing depreciation and depletion, by the application of the "economic-service-life" method to the actual legitimate cost of Hope's properties (R. I, 51–52).

The Commission's "Findings as to Lawfulness of Past Rates" were arrived at on the same principles and in substantially the same manner as the "Order Reducing Rates," except that they were based on actual operating experience for the years in question, instead of a test year (R. I, 11).

In issuing its order and findings the Commission rejected Hope's argument that post-investment changes in price levels had to be reflected in the rate base and in computing both accrued depreciation and depletion and the annual allowance in operating expenses for these items (R. I, 20–23, 36, 41, 52). It condemned as hypothetical and without probative value the "reproduction cost new" and "trended original cost" estimates

(amounting to approximately $97,000,000 and $105,000,000, respectively) submitted in evidence by Hope in support of its claimed rate base of some $66,000,000 (R. I, 20–23). The Commission also rejected Hope's contention that, in any event, the rate base should have reflected an additional sum of about $17,000,000, largely representing expenditures for well-drilling prior to 1923 which Hope had charged to operating expenses (R. I, 24–34). Likewise unsuccessful was Hope's argument for adopting the "percent condition" theory of measuring accrued depreciation (R. I, 38).

Pursuant to Section 19 of the Act, Hope filed an application for rehearing (R. II, 51), and upon denial petitioned the United States Circuit Court of Appeals for the Fourth Circuit for a review of the Commission's "Order Reducing Rates" and the Commission's "Findings as to Lawfulness of Past Rates" (R. IV, 3).[7]

DECISION OF THE CIRCUIT COURT OF APPEALS

On review, the court below, with one judge dissenting, set aside the Commission's "Order Reducing Rates" on the basic grounds that: (1) the Commission's use of a prudent investment rate base failed to reflect "present fair value," in view

[7] Hope did not seek a stay of the Commission's order from the Circuit Court of Appeals and such order has not been stayed; instead Hope agreed with its customer companies to charge the ordered rates pending litigation, upon the customers' agreement to make Hope whole if the Commission's order should be finally invalidated.

of the post-investment "decided change" in price levels shown by the record and by judicially noticeable facts (R. IV, 172, 183–184); (2) the Commission erroneously excluded from the rate base the well-drilling costs previously incurred and charged to operating expenses prior to 1923 (R. IV, 172, 184–189); (3) the Commission improperly determined accrued depreciation on the basis of "theoretical formulas," without considering the present physical condition of Hope's property (R. IV, 172, 189–190); (4) the Commission should have based its annual allowance in operating expenses for depreciation and depletion upon the "present fair value" of the physical property, instead of upon actual legitimate cost (R. IV, 194–198); (5) the Commission should have included in 1940 operating expenses $165,963 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941 (R. IV, 198); (6) the Commission should have made an annual allowance for depreciation and depletion on capital added to the rate base after 1940 (R. IV, 196).

The court below also set aside the Commission's "Findings as to Lawfulness of Past Rates," holding that: (1) the Commission had no jurisdiction to make findings as to lawfulness of past rates "to be given effect in rate proceedings before state commissions," and that rates filed with the Commission under Section 4 (e) of the Act became the

only "lawful" ones which Hope could charge or accept until changed by the Commission; (2) the Commission could investigate "the conditions and rates of the past" as an incident of its power to fix future rates, but that so viewed the findings in question were invalid for the same reasons as its "Order Reducing Rates," and were also objectionable in that they were based on actual experience for the years in question, rather than reasonable estimates of expense based on experience during a prior period (R. IV, 200, 202).[8]

## SUMMARY OF ARGUMENT

### I

In judicial review under the Natural Gas Act the statutory and constitutional standards coalesce. As there is no question here of the adequacy of the Commission's procedure or the existence of evidence to support its basic findings, the question is whether its order, as applied to the facts before it and viewed in its entirety, produces an arbitrary result. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586. Thus tested, the order is clearly valid. The prescribed rates are plainly not arbitrary in the light of the financial history of the Company,

[8] On March 8, 1943, the court below granted a motion for the stay of its mandate pending further order, upon the condition that a petition for writ of certiorari be filed with the Supreme Court of the United States within thirty days (R. IV, 209). The petition was filed on April 6, 1943.

which discloses, through the payment of dividends and the accumulation of earned surplus, that it has earned the total investment in the Company nearly seven times over. If the Company's proffered rate base were accepted, its average rate of return during the preceding several years would have been only 3.27 per cent; so modest a rate, without protest, suggests an inflation of the rate base claimed. *Dayton Power & Light Co.* v. *Public Utilities Commission*, 292 U. S. 290, 311, 312; *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151. Moreover, many doubtful items were resolved in favor of the Company, which aggregate over $26,000,000 in terms of the rate base, and more than $600,000 in terms of annual operating expenses; and the rate of return, 6½ per cent, is a generous one. The actual experience of the Company under the prescribed rates provides reassurance that in fact they were liberal.

We turn, nevertheless, to a consideration of the component determinations made by the Commission which were reviewed and set aside by the court below.

## II

The Commission properly used prudent investment to determine the rate base. It found the base to be $33,712,526, calculated to be the actual legitimate cost of gas plant in service less accrued depletion and depreciation plus net capital

additions through 1943, unoperated acreage and working capital.

The statute clearly contemplates that the Commission should give primary if not exclusive emphasis to prudent investment, if constitutionally possible. There is, we submit, no constitutional barrier. The so called rule of *Smyth* v. *Ames*, requiring a fair return on the "present fair value" of the property, is unsound and unworkable. It is based on the eminent domain principle of just compensation for a taking of property, a principle which is inapposite to regulation. Criticism of the doctrine by informed sources has been persistent and weighty. On the basis of long experience, virtually all informed opinion is agreed that effective rate regulation on a fair-value basis is a practical impossibility and that the standard of prudent investment is sound in principle and eminently workable, is just to consumers and to investors, and will attract sufficient capital to secure adequate service.

The view of the court below, that price trends must be taken into account, would introduce in another way the same irrelevancies and uncertainties which have led to the breakdown of the present-fair-value rule. There should be no compulsion upon the Commission to employ formulas of that sort. If price trends are relevant as bearing upon stability of investment, this factor can be taken into account in determining the permitted rate of return.

## III

In determining actual legitimate cost or investment, the Commission correctly refused to include in the rate base $17,000,000 representing largely intangible costs of well drilling properly charged to operating expenses before 1923. The Commission found that it was the accepted practice at the time for the industry to charge well-drilling expenditures to expense, that Hope deliberately and correctly accounted for such items as operating expenses, and that well-drilling expenditures had been contemporaneously recovered through revenues from the rate payers. In accordance with the overwhelming weight of authority, the Commission, although it was willing to and did correct genuine accounting errors, refused to include in the investment base the amounts previously and properly charged to operating expenses. To have included such amounts would have taken multiple exactions from the rate payers by compelling them to pay a return and an annual allowance for depreciation on the money they had already paid to the utility. The utility has no existing capital investment in the well-drilling costs for which the rate payers have reimbursed the Company, and is not entitled to a return on capital invested by its rate payers.

## IV

The Commission properly used the economic-service-life principle in determining accrued de-

preciation. This principle embodies a consideration of the present physical condition of the property as well as a consideration of the functional causes of depreciation. By returning the full original investment, the method used is fair to the utility, investors, and consumers. The Commission's practice is one which has been analyzed and approved by this Court. *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 167, 168. The method has likewise been approved by the Interstate Commerce Commission, the Bureau of Internal Revenue, and most utility commissions. Moreover, the amount deducted by the Commission for accrued depletion and depreciation was about $24,000,000 less than the amount which the Company had accrued on its books for depletion and depreciation.

## V

The Commission properly used prudent investment as a base in determining the annual allowance for depreciation and depletion. The rates of depreciation and depletion were based on the economic-service-life principle and were thus correlated with the accrued depreciation and depletion. The rates were applied to the actual cost of the property. Under the decision of this Court in the *Natural Gas Pipeline* case, *supra*, a wasting asset business of limited life, such as the enterprise here involved, is in no event constitutionally entitled to no more than a return of its

actual legitimate cost of plant at the end of the economic life of the property. Any additional return would require the rate-payers to contribute to the capital of the company. See *Lindheimer* v. *Illinois Bell Telephone Co., supra,* at 169. The method applied by the Commission is that universally recommended and followed by business enterprises, economists, accountants, and state and regulatory agencies.

## VI

Hope was not harmed by the exclusion from the operating expenses for 1940 of an experimental deep-test well completed in 1941, since the future allowance for that purpose was more than large enough to absorb any possible errors in accounting for the test year.

## VII

In aid of state regulation the Commission exercised its broad investigatory and fact-finding powers to determine the extent to which Hope's interstate wholesale rates were unjust and unreasonable and therefore unlawful for the years 1939, 1940, 1941 and the first half of 1942. It is doubtful that these findings are here reviewable. See *United States* v. *Los Angeles & S. L. R. Co.,* 273 U. S. 299, 309, 310. There was, however, authority to make the findings despite the lack of reparation power. Cf. *Atlantic Coast Line* v. *Florida,* 295 U. S. 301. Resort to such authority

promotes the Congressional purpose of an efficient and harmonious dual system of rate regulation. *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, 317 U. S. 456, 467. The findings, like the order prescribing future rates, are supported by evidence.

## ARGUMENT

### I

### VIEWED IN ITS ENTIRETY, THE COMMISSION'S ORDER PRESCRIBING RATES COMPLIES WITH THE STATUTORY REQUIREMENTS AND IS NOT CONFISCATORY

#### A. SCOPE OF JUDICIAL REVIEW

The Natural Gas Act and the decisions of this Court prescribe the division of functions between the Commission and the courts reviewing its rate orders. Section 19 (b) of the Act, conferring jurisdiction upon the circuit courts of appeals to review orders of the Commission, accords finality to the Commission's findings "as to the facts, if supported by substantial evidence." This fits within the general pattern of recent Congressional policy, revealed in other statutes, to entrust specialized agencies with the functions of appraising conflicting evidence, measuring the weight and credibility of testimony, and finding the facts. *Opp Cotton Mills, Inc.* v. *Administrator*, 312 U. S. 126, 154; *N. L. R. B.* v. *Link-Belt Co.*, 311 U. S. 584, 597; *Rochester Tel. Corp.* v. *United States*, 307 U. S. 125, 146; *Federal Trade Commission* v.

*Algoma Co.*, 291 U. S. 67, 73. In this aspect, the judicial inquiry on review of the Commission's order is limited to whether a fair hearing was afforded the Company and whether there is substantial evidence to support the Commission's findings of fact. *St. Joseph Stock Yards Co.* v. *United States*, 298 U. S. 38, 51; *Interstate Commerce Commission* v. *Louisville & Nashville R. R.*, 227 U. S. 88, 91; *Virginia Ry. Co.* v. *United States*, 272 U. S. 658, 663; *Tagg Bros. & Moorhead* v. *United States*, 280 U. S. 420, 444; *Florida* v. *United States*, 292 U. S. 1, 12.

No question was raised below as to the finality of the Commission's factual findings, or as to the meeting of all procedural requirements. The court below did not hold that any of the Commission's findings, whether basic or ultimate, were not supported by substantial evidence; the record in fact contains substantial evidence to support each basic and ultimate finding made by the Commission.[8a] The court below likewise did not hold that Hope was denied a fair hearing; and here again the record clearly establishes the contrary. The Commission's order of October 3, 1939, fixing the date of the hearing, set forth all the issues involved and, pursuant to the Commission's rules

[8a] For example, original cost: R. I, 225–341; R. III, 25–81. Depreciation: R. I, 373–390; R. III, 25–81, 175–201. Rate of return: R. III, 224–365, 397–489. Working capital: R. III, 211–224. Income, allocation of costs of service: R. III, 224–365.

of practice, prescribed the procedure for Hope "to open and close these proceedings with the presentation of its evidence"[9] (R. II, 34–36). At the hearing, Hope was afforded and availed itself of full opportunity to present its evidence, to cross-examine witnesses, to test, explain or rebut evidentiary facts, to present briefs and oral argument, and otherwise to be heard on all the issues involved.[10]

Apart from the questions of procedural requirements and factual sufficiency, there remain solely the issues of whether the rates prescribed by the Commission are "just and reasonable" under the Act, and whether they violate any constitutional precepts of fairness. Rate-making orders must face in the courts the scrutiny to which administrative and regulatory orders of Government agencies in other fields are subjected (cf. *Gray* v. *Pow-*

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[9] Sec. 50.63 of the Commission's Provisional Rules of Practice and Regulations under the Natural Gas Act.

[10] There were forty-three days of hearing, at which a comprehensive record of more than 14,000 pages of exhibits and testimony was produced and during which Hope presented its case-in-chief, cross-examined Commission witnesses, and presented rebuttal and surrebuttal testimony. Main and reply briefs were filed by Hope and by the other parties to the proceedings: these briefs included requested findings in great detail, both basic and ultimate, relating to all subjects involved in the proceedings. Oral argument was presented by Hope's counsel to all five members of the Commission on October 27, 1941. After the Commission issued its opinion and order fixing rates, Hope filed an extensive petition for rehearing and stay of the order.

*ell*, 314 U. S. 402; *South Chicago Coal & Dock Co.* v. *Bassett*, 309 U. S. 251), but there is no reason to require that they run any more formidable gauntlet.[1] In this aspect—the statutory and constitutional standards being substantially the same—the true test is whether "the limits of due process" have clearly been overstepped, and whether "the Commission's order, as applied to the facts before it and viewed in its entirety," produces an arbitrary result. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586. But in condemning the rates prescribed by the Commission, the court below did not view the Commission's order "in its entirety" in order to determine whether it produced unreasonable or confiscatory results. The court rather concerned itself with particular determinations of the Commission, contrary to the repeated pronouncements of this Court that the result of the rate fixed, not the method employed, is determinative (*West Ohio Gas Co.* v. *Public Utilities Commission*, 294 U. S. 63, 70; *Railroad Commission* v. *Pacific Gas & Electric Co.*, 302 U. S. 388, 394), and that the courts may not interfere unless the complaining party clearly establishes that the pre-

[1] See Black, Douglas, and Murphy, J. J., concurring in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 608; Frankfurter, J., concurring in *Driscoll* v. *Edison Light & Power Co.*, 307 U. S. 104, 122; Brandeis, J., concurring in *St. Joseph Stock Yards Co.* v. *United States*, 298 U. S. 38, 78–82.

scribed rates are confiscatory. *Los Angeles Gas Co.* v. *Railroad Commission*, 289 U. S. 287, 305; *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 169; *Dayton Power & Light Co.* v. *Public Utilities Commission*, 292 U. S. 290, 298; *St. Joseph Stock Yards Co.* v. *United States*, 298 U. S. 38, 53.

B. VIEWED IN THEIR ENTIRETY, THE COMMISSION'S PRESCRIBED RATES ARE PLAINLY NOT ARBITRARY

As shown hereinafter (pp. 33–49, 70–109), the Commission's rate order adequately meets even the supererogatory criteria adopted below. It is even clearer, however, that the Commission's results, when viewed in their entirety, meet every test of reasonableness and fall far short of confiscation.

1. *Hope's financial history*

The total rate reductions ordered by the Commission amounted to a decrease of about $3,600,000 in annual operating revenues (R. I, 6). The impact of this reduction upon Hope must be appraised against the background of the Company's financial history. From the time of its incorporation in 1898 through 1940, Hope's total issue of capital stock for cash or property has been about $17,000,000 (R. III, 7). On this investment, Hope has paid dividends of over $108,000,000 and has accumulated an earned surplus of over $8,000,000—thus earning its total investment in the Company

nearly seven times over.[12] During its entire business life, down to 1940, Hope has earned an average of more than 20% per year on the average annual amount of its capital stock issued for cash and other assets (R. III, 7, 15, 17).[13] After recouping all expenses, its overall net operating income or profit has exceeded $86,000,000 (R. III, 17, Sched. 4).

2. *Actual experience under prescribed rates*

A sound test to measure a complaint that rates are confiscatory is the actual financial experience of the public utility thereunder. *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 163; cf. *Louisville* v. *Cumberland Tel. & Tel. Co.*, 225 U. S. 430, 433, 436; *Knoxville* v. *Knoxville Water Co.*, 212 U. S. 1, 16, 18; *Lincoln Gas Co.* v. *Lincoln*, 250 U. S. 256, 262, 268; *Brush Electric Co.* v. *Galveston*, 262 U. S. 443, 446. Even against the backdrop of its very profitable history, the actual experience of the Company under

[12] The precise figures are (R. III, 7, 15, 17):

| | |
|---|---|
| Capital stock issued for cash | $15,600,000 |
| Capital stock issued for property | 1,369,300 |
| Total | 16,969,300 |
| Dividends paid in cash | 97,273,640 |
| Dividends paid in capital stock | 11,000,000 |
| Total | 108,273,640 |
| Earned surplus accumulated | 8,159,170 |

[13] On an average *invested* capital of $23,198,278, Hope has earned an average of $2,772,210 annually (R. III, 15), or about 12% per year.

the lower rates prescribed by the Commission, since July 15, 1942, when they became effective, answers any claim of confiscation.[14]

The Commission allowed Hope a 6½% rate of return on investment. During 1939, 1940 and 1941, the Company paid dividends of 10% on its common stock (R. III, 14); and in the year 1942, during about half of which the lower rates were in effect, it still found it possible to pay dividends of 7½%. During the three years 1940–1942, Hope's earned surplus increased by $8,500,000, to a total of almost $14,000,000, an increase sufficient to pay a 50% dividend on all outstanding capital stock (Appendix B, Table 4). The liquidity and affluence of the Company may be gathered from the fact that at the end of 1942, its financial position per books showed nearly as great an investment represented by cash and Government bonds as by net utility plant in service. (Appendix B, Table 4.)

In fixing the rates for the future, the Commission employed the Company's 1940 level of gas sales and revenues (R. I, 51, 70). But during the four years 1939–1942, Hope's interstate gas sales

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[14] The results of the Company's operations for 1941 and 1942 are not in the record but have been made available by the Company to the Commission in sworn statement form. They appear in Appendix B, pp. 136–140, *infra*. At the oral argument we shall move for leave to have this material included in the record.

and revenues showed a considerable increase (Appendix B, Tables 1 and 2):

| Year | Interstate gas sales, MCF | Interstate gas revenues |
|---|---|---|
| 1939 | 41,350,589 | $14,866,894 |
| 1940 | 53,604,243 | 19,296,755 |
| 1941 | 63,685,009 | 22,835,340 |
| 1942 | 69,960,811 | 25,229,783 |

The additional 16,000,000 MCF of gas sold in 1942 as compared with 1940 would, at the old rates, have correspondingly increased Hope's gas revenues more than $6,000,000 (Appendix B, Tables 1 and 2). Had the Commission used the 1942 level, which was not accompanied by a corresponding increase in operating expenses, the Commission would have been justified in making an additional substantial reduction in Hope's rates. For the prescribed rates, based upon 1940 operations and limited to a 6½% rate of return, would have resulted in a reduction of $4,757,452 in Hope's 1942 revenues, had they been in effect for the entire year; whereas if the rates had been based upon 1942 operations and likewise limited to a 6½% rate of return, the reduction in 1942 revenues would have been $5,849,242. Therefore, even under the prescribed rate reduction, Hope is earning $1,091,790 annually in excess of a 6½% rate of return, if the 1942 level is taken as the criterion (Appendix B, Tables 1, 1-A and 5). This excess of $1,000,000 is equiv-

alent to a 6½% return on a $16,800,000 investment, which is equivalent to adding this amount of investment to the rate base for the year 1942.

*3. The rate base sought by Hope does not square with its financial history*

How wide of the mark falls Hope's complaint of confiscation may be gathered by equating its average rate of earnings against the rate base to which it claims to be entitled. The Commission allowed a rate base of $33,712,526 (R. I, 50). Hope sought a base of some $66,000,000 (R. I, 20–23), founded upon estimates of "reproduction cost new" amounting to about $97,000,000, and estimates of "trended original cost" amounting to about $105,000,000, alleged to be evidence of present "fair value." These estimates were obviously too conjectural and illusory (R. IV, 180) to support a finding of confiscation as a result of their rejection in favor of the recorded and accurate cost figures. *Los Angeles Gas Co.* v. *Railroad Commission*, 289 U. S. 287, 319; *Railroad Commission* v. *Pacific Gas & Electric Co.*, 302 U. S. 388, 397. But apart from their unreliability, if Hope's estimates are accepted, Hope's average rate of return for the four-year period from 1937-1940 would amount to only 3.27% (R. I, 481). "So modest a rate suggests an inflation of the base on which the rate has been computed" for "men do not transact business without protest at confiscatory rates." *Dayton Power & Light Co.* v.

*Public Utilities Commission*, 292 U. S. 290, 311–312. Not only has Hope never seen fit to apply for leave to increase its rates pursuant to Section 5 (a) of the Act, but its gas plant has been well maintained and operated and during this period it has received an annual average return of about 9% on the average investment (R. III, 13–17; 21–24). Such a financial history completely disposes of any contention that during the years 1937–1940 Hope was not receiving an adequate return. Cf. *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151.

4. *Doubtful items of substantial amount were resolved by the Commission in Hope's favor*

The reduction in rates ordered by the Commission, amounting to about $3,600,000 annually, was reached after the allowance of substantial items in the rate base and in operating costs which the Commission might well have excluded. The resolution of these doubts in Hope's favor by the Commission, resulting in an increase in the rate base of perhaps $26,000,000 and an increase in allowed operating costs of some $600,000, renders well-nigh impossible any clear or convincing showing that the prescribed rates are confiscatory. Cf. *Lindheimer* v. *Illinois Telephone Co.*, 292 U. S. 151, 175. These are some of the more important instances in which doubts were resolved in favor of Hope and liberal allowances made to it as a consequence:

1. Items totalling almost $26,000,000 were included in the rate base although strong arguments were presented for their exclusion, to wit:

(a) The Commission included in the rate base $1,295,953 representing plant costs in 1918–1923, which were first capitalized by Hope and then arbitrarily charged off to operating expenses (R. I, 35). Since the Company had already recouped that amount from the revenues paid by rate payers during the years for which those items were included in operating expenses, the Commission would have been justified on purely equitable considerations in excluding that total from the rate base.

(b) The Commission (one member dissenting) deducted from actual original cost only $22,328,016 for accrued depletion and depreciation. This was about $24,000,000 less than the amount which Hope had already accrued on its books for depletion and depreciation (R. I, 50, 80–89; R. III, 175–176). Hope could hardly have been heard to complain if the Commission had accepted the Company's own figures, as Commissioner Scott urged; yet the lesser sum was deducted, giving a correspondingly larger rate base.

(c) The Commission included in the rate base Hope's entire gas acreage costing $566,105, notwithstanding that some of it is not being presently used in the Company's business and therefore might well be rejected as a base for a return to the Company (R. I, 47–48).

(d) As the court below noted, the Commission included in the rate base $277,820 more for working capital than Hope's corrected claim totalled for that item (R. IV, 193–194).

2. Doubtful items totalling more than $600,000 were added to annual operating expenses and thus reflected in the prescribed rates, to wit:

(a) The Commission allowed, on a cost basis, $1,460,037 in annual operating expenses for annual depletion and depreciation. This allowance is greater by some $120,000 than that which Hope's claimed annual rates for depreciation would have produced (R. I, 52–53; R. III, 207–209).

(b) At the Company's request, $138,018 for administrative and general expenses was allowed in operating expenses for 1940, although such amount was formerly capitalized by election of the management (R. I, 49–50).

(c) The Commission added $421,160 to the 1940 figures for operating expenses, which already exceeded 1939 operating expenses by $2,300,000 (R. I, 62). This included an allowance for increased West Virginia property taxes, even though the Company had represented to the Commission that, as a result of the ordered rate reduction, it expects to save $338,000 annually in West Virginia property taxes (Hope's Reply Brief before the Federal Power Commission, p. 52).

3. The Commission allowed Hope a return of 6½% upon its rate base (R. I, 4). This is to be contrasted with the 5½% return allowed by the

Commission to electric utilities (*Chicago District Electric Gen. Co.*, 2 F. P. C. Rep. 412 (1941)), and the even lower rate of 5% allowed by the Illinois State Commission—a rate which in itself raises no substantial Federal question. *Peoples Gas Light & Coke Co. v. Slattery*, 373 Ill. 31, 25 N. E. (2d) 482, appeal dismissed, 309 U. S. 634. See also *Knoxville v. Knoxville Water Co.*, 212 U. S. 1, 17.

In the acoustics of such liberality, the cries of confiscation ring hollow indeed.

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The court below rejected the Commission's order prescribing rates because of what it regarded as a failure to observe certain required formulae in computing the rate base and the annual operating expenses. Even if the court was qualified to consider separately, each item going into rate base and operating expenses, and the methods and theories of computation utilized by the Commission, we believe the objections to the Commission's order were unfounded.

These objections, which will be treated under Points II through VI of this brief, are directed to the use of a prudent investment rate base (Point II), the exclusion therefrom of certain well-drilling expenses (Point III), the determination of the accrued depreciation and depletion (Point IV), the annual allowance for such items (Point V), and the exclusion from 1940 operating expenses of expenditures for an experimental well (Point VI).

## II

### THE COMMISSION MAY PROPERLY USE A "PRUDENT INVESTMENT" RATE BASE

Chief among the court's objections to the Commission's order was the use of Hope's "prudent investment" in its interstate plant to compute the rate base. Since Hope had kept complete documentary evidence of its expenditures throughout its entire existence, the Commission found that this was the best evidence of the actual legitimate cost of Hope's plant, so that no estimates were needed (R. I, 23, 174). Upon the basis of Hope's own records, and after a check of the inventory of Hope's property in service, the Commission determined the cost of Hope's facilities devoted to interstate commerce, as of December 31, 1940, to be $51,957,416 (R. I, 3, 50). After deducting therefrom accrued depletion and depreciation, and adding thereto certain items for working capital, future capital additions and useful acreage, the Commission obtained a total rate base of $33,712,526 (R. I, 45, 50). Hope, on the other hand, claimed a rate base of some $66,000,000, and to support it offered evidence of "present fair value," consisting of estimates of "reproduction-cost-new" of Hope's plant, amounting to about $97,000,000, and estimates of "trended-original-cost" of the plant amounting to about $105,000,000. These estimates the Commission admitted in evidence and analyzed. However, it discarded them

as not being predicated upon facts and as too hypothetical, conjectural, and illusory to be accorded probative value in the proceedings (R. I, 20–22). The Commission also rejected Hope's argument that post-investment changes in price levels had to be reflected in the rate base (R. I, 20–23, 36, 41, 52). It accordingly adopted as the rate base the actual legitimate cost (depreciated) of the Company's facilities used in interstate commerce (R. I, 20–21, 36–50).[15]

The court below agreed with the Commission that Hope's estimates of "reproduction-cost-new" and "trended-original-cost" were too conjectural and illusory to be given any weight in determining the rate base (R. IV, 180). It nevertheless ruled that the prescribed rates were both confiscatory in the constitutional sense and unjust and unreasonable in the statutory sense,[16] for failure to reflect, as required by the rule of *Smyth* v. *Ames*, 169 U. S. 466, the increase in the present fair value of Hope's property since it had been installed, caused by the decided rise in the price level which the court discerned in Hope's estimates and of which it took judicial notice (R. IV, 180).

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[15] By stipulation, Hope's distribution property and property used to transport coke-oven gas were excluded from the proceeding (R. I, 18).

[16] The lower court recognized, in accordance with *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586, that the statutory standard of "just and reasonable" (Section 5 (a)) coincided with the constitutional test of confiscation (R. IV, 175).

In so holding, the court below disregarded the clear intent of Congress that the Commission should, subject to constitutional limitations, use prudent investment in determining the rate base. It likewise disregarded the recent decision of this Court in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, indicating that a rate base so determined is not *ipso facto* unconstitutional. Moreover, the court below imposed upon the Commission, without warrant in law, an obligation to find a "present fair value" of Hope's interstate properties on the basis of price trends.

A. THE NATURAL GAS ACT CONTEMPLATES USE OF PRUDENT INVESTMENT IN DETERMINING RATE BASE, SUBJECT TO CONSTITUTIONAL LIMITATIONS

The Natural Gas Act requires that interstate gas rates shall be "just and reasonable" (Sec. 4 (a)), and empowers the Commission to prescribe "just and reasonable" rates for the future and to order a decrease where existing rates "are not the lowest reasonable rates." (Sec. 5 (a)). The only formulae laid down by Congress to guide the Commission in exercising its rate-making powers, are those contained in Section 6.

> SEC. 6. (a) The Commission may investigate and ascertain the *actual legitimate cost* of the property of every natural-gas company, the depreciation therein, *and, when found necessary for rate-making purposes,* other facts which bear on the determination

of such cost or depreciation and *the fair value of such property.*

(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the *original cost* thereof, and shall keep the Commission informed regarding the *cost* of all additions, betterments, extensions, and new construction. [Italics supplied.]

The emphasis upon actual and original cost, and the absence of any mention of "present fair value," lead to an inference that Congress intended the Commission to put primary if not exclusive reliance upon prudent investment. This inference becomes a definite indication of Congressional intention when considered with the House and Senate Committee reports on the bill which became the Natural Gas Act. These reports, in making a sectional analysis of the bill, refer only to original cost and not to "fair value" (H. Rep. No. 709, 75th Cong., 1st Sess., p. 5; S. Rep. No. 1162, 75th Cong., 1st Sess., p. 4).

That Congress desired the Commission to base rate making on prudent investment to the extent the Constitution permitted, is further to be gathered from a statute in *pari materia* with the Act here involved, and entrusted to the administration of the same agency: the Federal Power Act, enacted as Title II of the Public Utility Act of 1935. As originally introduced in the Sen-

ate, Section 208 of S. 2796 (which became the Federal Power Act), whose language is identical with that of Section 6 of the Natural Gas Act, specifically placed rate regulation on the prudent investment basis. S. 2796, 74th Cong., 1st Sess. The Senate Committee on Interstate Commerce in favorably reporting the bill, approved such a rate-making basis (S. Rep. No. 621, 74th Cong., 1st Sess., at p. 52):

> Rate regulation must eventually be based on prudent investment. Recent decisions of the Supreme Court * * * afford grounds for the hope that this rule which the Committee considers essential to effective rate regulation will be sustained if the Congress should now definitely adopt it as a legislative policy.

An amendment offered by Senator Bailey, requiring the use of "fair value" as the rate base was not accepted (79 Cong. Rec. 8858), and on June 11, 1935, the Senate passed S. 2796, providing in Section 208 (c) that in determining just and reasonable rates, the Commission shall fix a rate base "not in excess of the actual legitimate cost of the property." 79 Cong. Rec. 9065; see also S. Rep. No. 621, 74th Cong., 1st Sess., p. 20.

However, on June 3, 1935, this Court had reaffirmed the doctrine of *Smyth* v. *Ames* in *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662. The House Committee apparently read the *West* decision as casting doubt on the constitutionality of

adopting prudent investment as the exclusive rate base, for in considering S. 2796, it deleted Section 208 (c) and inserted Section 208 (a), authorizing the Commission to ascertain actual legitimate cost, with the further authorization to ascertain "fair value," "when necessary for rate-making purposes." H. Rep. No. 1318, 74th Cong., 1st Sess., p. 30.

This legislative material leads to the conclusion that while Congress did not bind the Commission to the use of any single formula in determining the rate base (*Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575), it did intend the Commission to use prudent investment, and to consider "fair value" only if constitutionally necessary. Independent legal opinion, exemplified in the 1940 report of the Special Committee of the Public Utility Law Section of the American Bar Association, concurs in this view.[18]

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[18] The Committee, analyzing Section 208 of the Power Act and the companion Section 6 of the Gas Act, stated (1940 Report, pp. 14–15):

"It will be noted that the primary duty of the Commission under these two provisions is to ascertain the cost of the property and the depreciation therein and that 'other facts which bear on the determination of such cost or depreciation, and fair value of such property' are to be determined only 'when found necessary for rate-making purposes.' There is here the possible inference that the Congress, when it drafted this provision, was hopeful that the courts would decide that nothing other than the 'actual legitimate cost' of the property would be 'found necessary for rate-making purposes.' However that may be, it is patent that an accounting or cost rate base was dominant in the Congressional mind, and that these

B. THERE IS NO CONSTITUTIONAL PROHIBITION AGAINST THE DETERMINATION OF A RATE BASE SOLELY ON PRUDENT INVESTMENT

This Court, in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, had before it the propriety of a base selected by the Commission under the Natural Gas Act for the determination of an annual amortization allowance chargeable to operating expenses. This Court ruled that the owner of a "wasting-asset business of limited life" such as the company there involved, has no constitutional right to a return of more than its original investment, even though the reproduction cost of the company's property during the period in question is greater than the original cost. The reason assigned for the validity of disregarding the appreciation in the value of the plant was that "this theoretical accretion to value represents no profit to the owner, since the property dedicated to the business, save for its salvage value, is destined for the scrap-heap when the business ends" (315 U. S. at 593). While this issue did not involve the determination of a rate base on which the owner is entitled to a return, the applicable principles would seem to be the same as where a base for annual amortization allowance is in question. For if the owner of a "wasting-asset business of limited life"

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very recent statutes in that respect are the very antithesis of some of the older state statutes which prescribe the reproduction cost new less depreciation formula."

does not have a constitutional right to recover more than his original investment, he can scarcely be entitled to an annual fair return upon more than such investment. The "theoretical accretion" to the original investment, which under the decision of this Court need not be returned to the owner in the form of annual amortization allowances, by parity of reasoning need not be recognized as a basis for an annual return in the form of earnings. Any line of distinction between these propositions would produce the anomaly of a requirement that an owner receive an annual return *upon* the accretion without being entitled to a return *of* the accretion itself—the fabrication of a constitutional right to receive piecemeal during the life of a business that which the owner is not entitled to receive in one lump sum at the expiration of its life. The determination of an amortization base is no more integral in the rate making process than the determination of a rate base (cf. *Lindheimer v. Illinois Bell Telephone Co.*, 292 U. S. 151, 164). If the Commission is authorized to use actual legitimate cost for the former purpose as this Court held in the *Pipeline* case, it must be equally authorized to use it for the latter purpose.

Even if the decision of this Court in the *Pipeline* case be deemed limited to "wasting asset businesses of limited life," its applicability to the instant case would be clear. As will be shown more fully hereinafter (pp. 102–103), companies such as Hope, engaged in the extraction and sale of

natural gas, are in a real sense "wasting asset businesses of limited life"; for according to accepted scientific principles, the wells and pools from which the gas is being withdrawn will inevitably be exhausted within a predictable future.

While this Court in the *Pipeline* case did not explicitly denounce the so-called rule of *Smyth* v. *Ames*, which requires that reproduction cost be considered in determining a rate base, we suggest that the decision in effect leaves the Commission free to reject conjectural estimates of reproduction cost and to adopt prudent investment as the rate base.[16]

C. THE COURT BELOW ERRED IN REQUIRING THAT PRICE TRENDS BE UTILIZED IN DETERMINING THE RATE BASE

In support of its claim to a $66,000,000 rate base, Hope sought to prove the "present fair value" of its interstate facilities by offering esti-

[16] This was gathered from the opinion of the majority not only by the three Justices concurring in a separate opinion (315 U. S. 575, 606), but also by the Public Utility Law Section of the American Bar Association (1942 Report, pp. 121–122) and the Committee on Progress in the Regulation of Public Utilities of the National Association of Railroad and Utilities Commissioners (Proceedings of 54th Annual Convention (1942) pp. 223–227). See also *Implications of the Case of F. P. C.* v. *Natural Gas Pipeline Co.*, Public Utilities Fortnightly, October 22, 1942, pp. 604–618.

The dissenting judge below also construed the *Pipeline* case to hold that there was no constitutional objection to the Commission's exclusive use of the prudent investment method; and he concluded that the Commission's order was within the scope of its statutory authority, reasonable, and supported by substantial evidence (R. IV, 203–205).

mates of "reproduction cost new" and "trended original cost" (R. I, 143–208). The Commission received Hope's estimates of "present fair value." However, when analysis revealed such estimates to be erroneous and conjectural, the Commission rejected them in favor of the actual legitimate cost, as reliably shown by Hope's complete books and records (R. I, 20–23). The court below agreed with the Commission as to the unreliability of such estimates, but held that decided price-rises since the original investment, which the court found in the record and judicially noticed, should have been taken into account in the rate base (R. IV, 172, 183–184). In this we submit the court erred, both in its assumption of fact and in its conclusion that price-trends were any more reliable than reproduction-cost estimates.

*1. There is no evidence that present value is greater than original cost*

In setting aside the Commission's rate order because it disregarded post-investment price rises, the court apparently assumed that the original cost of Hope's properties was substantially lower than their present value. There is little to support such an assumption. Although Hope has been in existence over forty years, it has been adding to its property gradually during all that time. The opinion below appears to assume that Hope acquired most of its property during periods of low prices. The facts belie this assumption. Ac-

cording to Hope's Exhibit 20 (R. I, 207, col. 2), only $25,000,000 of a claimed original cost of $70,000,000 was installed prior to 1917, and the rest ($45,000,000) was installed thereafter, when prices were rising. Included in these figures are the intangible costs of well-drilling originally charged to operating expenses, most of which were incurred prior to 1917; the exclusion of these costs would reduce substantially the $25,000,000 figure (Exhibit 20, p. 66). Moreover, the property installed during the low-price period has been largely depreciated. Therefore, although the price level has unquestionably risen since Hope first began operations, its substantial capital expenditures during the period of higher prices, coupled with the depreciation of its low-cost equipment, may well give a "present-value" figure not far removed from original cost.

*2. Results obtained by use of price trend factors are illusory and unreliable*

Even on the assumption that the present value of Hope's properties exceeds its original cost, the "price-trends" which the court below held to be a mandatory factor in the rate base are no more reliable than the estimates of fair value which the Commission rejected with the court's approval. The Commission is not aware of any method of "price trending"—whether general or specific—which does not share the inherent qualities of conjecture and illusion found in the cus-

tomary methods of determining "reproduction cost" and "trended original cost," as the court below conceded and as shown in the Supplement to this Brief (pp. 4–26, 42–48).

(a) *Specific* price trend factors may be applied in two ways. The first method is to obtain the quantity of labor or materials of a given class which went into a plant at the time of construction, and then to translate that quantity into present prices by comparing present prices with the original prices. For instance, if hourly cost of labor had by 1940 increased 300% over the cost in 1900, the estimated total cost of labor expended in 1900 in plant which is in service in 1940, would be multiplied by the translator factor of 300.

Where the translator is applied directly to the various elements which go to make up a plant, such as labor, materials and services, unreliable results are inevitable. For example, to use the illustration involving labor, Hope in this case multiplied the estimated labor costs incurred many years ago by a translator factor which recognized present prices of labor, without giving any recognition whatever to the increase in efficiency which has taken place and the consequent greater productivity of the same amount of labor, particularly through the use of modern tools and machines and through the reduction in the work day (R. III, 101–108). Thus, if labor costs of $100,000 went into the plant in 1900, and if the hourly rate of labor is now three times as great,

the original labor costs multiplied by 300%, or $300,000, would be the estimated value of the labor item in 1940, under the trended original cost. This assumes that the old methods of laying pipeline would prevail in 1940 and that the trench for "Big Inch" would today be dug by pick and shovel—assumptions wholly at variance with the facts. Similarly, in the case of gas mains, the old quantity at the old cost is multiplied merely by the translator factor which recognizes present prices, without giving any effect whatsoever to the improvements made in long distance transmission (R. III, 110–119). It is clear, therefore, that no better results would be obtained by the use of index numbers or price trends than have been obtained by reproduction cost studies. As a matter of fact, in many instances the results would be identical.

The other method of applying specific price trend factors involves a comparison of unit costs at the time of construction with "current reproduction" unit costs. To illustrate, if in 1900 a section of pipe cost $5,000 installed, and the estimated cost of reproduction was $7,500 in 1940, a translator of 150 would be applied to the investment figure. It is obvious that use of the unit cost method results automatically in the reproduction cost figure; hence, the translation of original cost into present values by this method suffers from all the infirmities of reproduction cost estimates.

(b) *General* price trends are used to determine the changes in the purchasing power of a dollar, rather than to translate the actual costs of specific facilities into present costs.[17] The use of general price trends to determine a rate base proceeds on the assumption that a dollar invested in Hope in 1900 should retain the same purchasing power in 1940; that is, its value should be maintained at such a level as to buy as much shelter, food, clothing, entertainment, etc., in 1940 as it could purchase in 1900. This method uses general index numbers rather than specific index numbers as the translator, but it possesses all the infirmities notoriously inherent in the reproduction cost method for which it has on occasion been substituted. Cf. *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662, 669–670. Moreover, while it is probably true that the index-number method can give just as accurate results as those obtained by use of reproduction cost and in less time, it is subject to additional objections. There are no satisfactory indices with which to value the dollar. No one knows the exact manner in which an investor in 1900 would have desired to spend a dollar, or the manner in which the same or another investor might desire to spend a dollar in 1940. The indices for this purpose are rather crude, and their use has a more logical relation to monetary control than to the valuing of specific

[17] See *West* v. *Chesapeake & Potomac Telephone Co.*, 295 U. S. 662.

public utilities. Moreover, the problem is not so much that of maintaining the purchasing value of the dollar as it is of maintaining the investment at its original amount. Large classes of investors, such as bondholders and preferred stockholders, make their investments under contracts by which they are to receive the principal amount of their investment (or par) and no more, irrespective of fluctuations in the price level. Common stockholders, on the other hand, may be adequately protected by adjusting the rate of return. Finally, the value of the dollar and the value of specific utilities may point in opposite directions, as occurred in the case of street railways in the 1920's. Cf. Brandeis, J., dissenting in *St. Louis & O'Fallon R. Co. v. United States*, 279 U. S. 461, 494–496.

These weaknesses in the use of price trends are magnified by the compulsory force to which the court below held them entitled. But apart from the unreliability of price trends, there is no warrant in law for the imposition of an obligation upon the Commission to utilize them. The Constitution "does not bind rate-making bodies to the service of any single formula or combination of formulas." *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. 575, 586. Yet the view of the majority below would restrict that freedom of choice by imposing the condition that the formula chosen in any case must yield a result

generally equivalent to that which would be obtained from the use of price trends. The *Pipeline* decision forecloses any contention that a rate order founded upon a prudent investment rate base is arbitrary simply because a larger rate base would result from the adoption of a formula reflecting prevailing price levels. Thus, the decision there sustained the use of an amortization base reflecting actual legitimate cost regardless of the fact that another basis of determination, taking into account post-investment fluctuations in price levels, would have yielded a larger sum. The question is not whether the use of price trends is permissible (cf. Stone, J., dissenting in *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662, 690) but whether it is mandatory; and this Court in the *Pipeline* case has in our view answered this in the negative.

For these reasons, we submit that the use of price trends was improperly held below to be a necessary factor in rate making.

D. THE RULE OF SMYTH V. AMES SHOULD BE RENOUNCED

We believe that the circumstances discussed above, and the similiarity between Hope's business and that involved in the *Pipeline* case, would warrant reversal of the decision below without further reconsideration of the doctrine of *Smyth* v. *Ames*. But since it is not certain that the vitality of that doctrine is at an end (see, e. g.,

Hale, *Does the Ghost of Smyth* v. *Ames Still Walk?*, 55 Harv. L. Rev. 1116), we respectfully urge this Court, in the interest of clarifying the Commission's functions as well as those of all other rate-making bodies, to place the troublesome phantom in its grave, and thus terminate the unsound and uneconomic dogma which it has evoked.

In offering argument against the "fair value" concept and in favor of the "prudent investment" concept of rate making, we ask the Court's indulgence, realizing that it is well informed on the subject and has on numerous occasions given judicial attention to the matter. Various members of the Court have, upon several occasions, severely criticized the "mischievous formula for fixing utility rates in *Smyth* v. *Ames*". *Driscoll* v. *Edison Light & Power Co.*, 307 U. S. 104, 122 (Frankfurter, J., concurring); *McCart* v. *Indianapolis Water Co.*, 302 U. S. 419, 423 (Black, J., dissenting); *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 276, 292 (Brandeis, Holmes, J. J., dissenting); *St. Louis & O'Fallon R. Co.* v. *United States*, 279 U. S. 461, 551–552 (Brandeis, Holmes, Stone, J. J., dissenting); *West* v. *Chesapeake & Potomac Tel. Co.* 295 U. S. 662, 680 (Stone, Brandeis, Cardozo, J. J., dissenting). However, we believe that such argument is appropriate because

the conflict between the two concepts presents the major issue in this case."[18]

We have printed in a Supplement to this brief various pertinent materials, including excerpts from the brief filed by the United States as *amicus curiae* in *Driscoll* v. *Edison Light & Power Co.*, No. 509, October Term, 1938, and from the supplement to the Commission's brief in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, Nos. 265 and 268, October Term, 1941. These materials show "the havoc raised by insistence on reproduction cost" as "a matter of historical record," how the rule of *Smyth* v. *Ames* "has seriously impaired the power of rate-regulation," how the "fair value" rule "has proved to be unworkable by reason of the time required to make the valuations, the heavy expense involved, and the unreliability of the results obtained"; and

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[18] Hope contended below that the general question whether the Commission may use the prudent investment method of rate making is not presented, since neither the Commission nor its staff had so designated the principal item used in determining the rate base. This is little more than a quibble. Since the wisdom of Hope's plant costs and investments has not been questioned, the actual legitimate cost or gross plant investment as determined by the Commission is synonymous with "prudent investment." *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, 289 (Brandeis, J., dissenting); *Los Angeles Gas Co.* v. *Railroad Commission*, 289 U. S. 287, 306. The separate opinion of Commissioner Scott clearly demonstrates that the Commission considered actual legitimate cost to be synonymous with prudent investment (R. I. 81).

how "even the investor, on whose behalf the constitutional safeguards have been developed, has received no protection against the rebounds from the inflated stock-market prices that are stimulated by the 'fair value' doctrine." (*Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 605–606.) These materials also show that the prudent investment approach produces a sound and workable rate base; that it curtails the length and expense of rate litigation and regulation; and that it protects the interests of both the consumers and the investors.

Here we shall show, in addition, that the "fair value" rule is based on principles of eminent domain which are irrelevant in rate making; that in rate regulation, as in price fixing, the reasonableness of the regulation should be the guiding principle; and that the allowance of a fair return on the capital prudently invested in the enterprise is reasonable.

While the material contained in pages 53–70 *infra*, is in large measure derived from the discussion in the Government's brief in the *Pipeline* case, we include it here, in somewhat condensed form, since the issue seems to us to be more centrally raised in this case, and its inclusion, in lieu of mere reference thereto, will serve the convenience of the Court and of the several parties in Nos. 34 and 35.

*1. The fair value rule is based on eminent domain concepts*

The rule that a rate is confiscatory unless it enables the utility to earn a fair return on the present fair value of its property is based on the doctrine in the law of eminent domain that "just compensation" must be paid for property "taken" for public use. *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662, 671; cf. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 602, 603.

This is confirmed by the historical development of the fair value rule. While at first protection against abuses in rate regulation was held to lie at the polls, not in the courts (*Munn* v. *Illinois*, 94 U. S. 113, 134), this view was later abandoned and the question of the reasonableness of rates was recognized to be justiciable, unreasonably low rates being held to constitute a deprivation of property without due process of law or a taking of property without just compensation. *Railroad Commission Cases*, 116 U. S. 307, 323, 331; *Georgia Railroad & Banking Co.* v. *Smith*, 128 U. S. 174, 179; *Chicago &c. Ry.* v. *Minnesota*, 134 U. S. 418, 458; *Budd* v. *New York*, 143 U. S. 517, 547. The "fair value" rule emerged shortly thereafter in *Reagan* v. *Farmers' Loan & Trust Co.*, 154 U. S. 362, which invalidated a rate order under which the company could not pay even one-half of its bond interest. The Court there observed *obiter* that the Constitution prohibits a taking of

"the use [of property] for the public benefit at less than its market value," just as it forbids acquisition of title to the property by eminent domain at less than "the value of the property as it stood in the markets of the world" (154 U. S. at 410).[19]

The analogy of a "taking" was not expressly referred to again until the lower court in *Smyth* v. *Ames* held that the earning of "a fair interest on the actual value of the property" of the railroad company is a measure of the reasonableness of rate reductions, just as in condemnation of title to the railroad "the present value of the property, and not the cost" is the proper measure of compensation. *Ames* v. *Union Pacific Ry.*, 64 Fed. 165, 177 (C. C. Neb.).

This text extracted from the law of eminent domain became the basis of the "fair value" rule of *Smyth* v. *Ames*, 169 U. S. 466, for determining the constitutionality of rates. See Henderson, *Railway Valuation and the Courts*, 33 Harv. L. Rev. 902, 906–912; Hale, *Conflicting Judicial Criteria of Utility Rates*, 38 Col. L. Rev. 959, 960–964. The rule is invoked to prevent rate regulation on any basis other than "present fair value"

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[19] In *Covington & Lexington Turnpike Road Co.* v. *Sandford*, 164 U. S. 578, 596, the Court observed that rates fixed so low as to destroy the value of property for all purposes would be invalid as a deprivation of property without due process of law.

(*cf. West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662), notwithstanding that when *Smyth* v. *Ames* was decided, original cost probably exceeded the "present fair value" of the utility's property, so that the original effect of the rule was to permit rates to be based on a value less than original cost.

*2. The eminent domain concept of present fair value is inapplicable to rate regulation*

In practice the "present fair value" test makes it impossible to measure the reasonableness of rates by any coherent standard, and renders rate regulation logically impossible.

The practical impossibility of developing a workable rule under the "present fair value" concept arises fundamentally from the fact that eminent domain principles have no proper application in the field of rate regulation. See Hale, *Conflicting Judicial Criteria of Utility Rates*, 38 Col. L. Rev. 959, 963.[20] Even before *Smyth* v. *Ames* was decided, it had already been established in a utility condemnation case that "the value of property, generally speaking, is determined by its productiveness—the profits which its use brings to the owner" (*Monongahela Navigation*

[20] It was precisely this principle of "just compensation" that led Mr. Justice Field in 1877 to dissent in *Munn* v. *Illinois*, 94 U. S. 113, and to deny any power in the States to regulate rates. 94 U. S. at 143.

*Co.* v. *United States,* 148 U. S. 312, 328–329; see *C. C. C. & St. L. Ry.* v. *Backus,* 154 U. S. 439), and that compensation must be paid not only for the physical property but also for the franchise. Earning power under the old rates thus became the test of value in condemnation cases. Hale, *The "Fair Value" Merry-Go-Round,* 33 Ill. L. Rev. 517, 519–520; Hale, *Conflicting Judicial Criteria of Utility Rates,* 38 Col. L. Rev. 959, 964.[21] In a rate case, however, the earning power necessarily depends on the rates to be allowed, which is the very question at issue.

Any physical property has only a scrap value unless it is capable of earning a return sufficient to justify a larger evaluation; consequently, the rate level, whose determination must await computation of "fair value" under *Smyth* v. *Ames,* is itself the prime factor in that value. Cf. *Ecker* v. *Western Pacific R. Corp,* 318 U. S. 448, 483; *Group of Investors* v. *Milwaukee R. Co.,* 318 U. S. 523, 540; *Consolidated Rock Co.* v. *DuBois,* 312 U. S. 510, 525. The value of a going concern in fact depends on earnings under whatever rates may be anticipated. The present fair value rule creates but offers no solution to the dilemma

[21] Of course, where the property of a nonutility without franchise is condemned, it is only the physical property and not the earning power or prospective profits that are taken and paid for. *Mitchell* v. *United States,* 267 U. S. 341; *Joslin Co.* v. *Providence,* 262 U. S. 668; *Bothwell* v. *United States,* 254 U. S. 231.

that value depends upon the rates fixed and the rates upon value. See Brandeis, J., concurring in *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, 292; *Federal Power Commission* v. *Natural Gas Pipeline Co., supra*, at 603 (Black, Douglas, Murphy, J. J., concurring); *Los Angeles Gas Co.* v. *Railroad Commission*, 289 U. S. 287, 305; *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662, 689 (Stone, J., dissenting); Hale, *The "Fair Value" Merry-Go-Round*, 33 Ill. L. Rev. 517–520; 2 Bonbright, *Valuation of Property*, pp. 1094 et seq.; Henderson, *Railway Valuation and the Courts*, 33 Harv. L. Rev. 1031.

The utter illogicality of invoking eminent domain principles of "just compensation" in rate regulation is best shown by the fact that strict application of those principles would render all rate regulation invalid or impossible. When property is taken under the power of eminent domain, the owner is "entitled to the full money equivalent of the property taken, and thereby to be put in as good position pecuniarily as it would have occupied if its property had not been taken." *United States* v. *New River Collieries Co.*, 262 U. S. 341, 343. Since the value of a public utility depends on earning power, under condemnation principles its present value would have to be measured by its earnings at the existing rates, and would be calculated by capitalizing those earnings at the prevailing rate of return upon investments involv-

ing similar risks. On the rate base thus determined, a fair return would have to be allowed which would, of course, be the rate of return on investments involving similar risks. The result would be no change in rates at all. This absurdity results from the truism that every rate reduction which reduces the net earnings of a utility *ipso facto* reduces the value of that utility; if the value prior to the rate reduction must be preserved for constitutional reasons, it necessarily follows that every rate order which reduces that value is invalid.[22] See Barnes, *The Economics of Public Utility Regulation* (1942), pp. 401–402.

While not in terms abandoning the "taking" theory with its corollary requirements of "just compensation" (see *West* v. *Chesapeake & Potomac Tel. Co.*, 295 U. S. 662, 671), this Court has resolved the dilemma, albeit at the expense of logic, by holding that some rate regulation is

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[22] The dilemma is not evaded by the contention that the actual market value will be less than the capitalized earnings by reason of the fact that the market will take into account the prospect of future rate regulation. A business has greater value if its owner can anticipate earnings in excess of just and reasonable profits, and the prospect of future regulation does not entirely diminish that anticipation. Hale, *The "Fair Value" Merry-Go-Round*, 33 Ill. L. Rev. 517, 530. If, therefore, under eminent domain principles, market value, which is earning power in the case of a public utility, sets the measure of "just compensation" and if rates must be fixed to pay the utility "just compensation" in the eminent domain sense, rates can never be reduced below the market expectations prior to the rate proceedings, and adequate rate regulation is still impossible.

permissible. In part the Court has permitted the exclusion of value supposedly due to "monopoly" position (*Clark's Ferry Co.* v. *Public Service Commission,* 291 U. S. 227, 238; see Whitten, *Fair Value for Rate Purposes,* 27 Harv. L. Rev. 419, 421–423; Richberg, *A Permanent Basis for Rate Regulation,* 31 Yale L. J. 263, 267), even though an exclusive franchise is an element of value in a condemnation case. *Monongahela Navigation Co.* v. *United States,* 148 U. S. 312, 328–329. In effect "value" became "a word of many meanings" (cf. *Group of Investors* v. *Milwaukee R. Co.,* 318 U. S. 523, 540), so that such factors as good will and earning power, while material to "exchange value" in condemnation cases, were excluded in determining the "special value" for rate purposes. See Brandeis, J., concurring in *Southwestern Bell Telephone Co.* v. *Public Service Commission,* 262 U. S. 276, 310–311.

The very existence of the power to regulate rates, therefore, shows that the concepts of "just compensation" and "fair value", drawn from the law of eminent domain, have no place in rate cases. Bonbright, *op cit. supra,* pp. 1092–1096; Bauer and Gold, *Public Utility Valuation,* p. 147; Beutel, *Valuation as a Requirement of Due Process,* 43 Harv. L. Rev. 1249, 1267; Hale, *The "Fair Value" Merry-Go-Round,* 33 Ill. L. Rev. 517, 519, 530; Hale, *Conflicting Judicial Criteria of Utility Rates,* 38 Col. L. Rev. 959.

*3. Rate regulation should be deemed violative of due process only if arbitrary or unreasonable*

These dilemmas and inconsistencies are avoided if rate regulation is regarded not as a taking of property for public use, but simply as an exercise of regulatory power. There is adequate room for such a distinction. Eminent domain is the power to command a sale; it involves an appropriation of title or of the use of property which is essential to the Government's need and which promotes the public welfare. Lewis, *Eminent Domain* (3d ed. 1909) § 6. The taking is justified not because the property is a public nuisance or other obstacle to valid legislative ends, but because it is needed for some valid public purpose or project. Nichols, *Eminent Domain* (2d ed. 1917), p. 278; Orgel, *Valuation under Eminent Domain* (1936), p. 2; see Gardner, *The Massachusetts Billboard Decision*, 49 Harv. L. Rev. 869, 889–892.

The regulation of rates, on the other hand, promotes the public welfare, not by a "taking," but by regulating and restricting the owner's use and enjoyment of his own property. Lewis, *Eminent Domain* (3d ed. 1909), §§ 246, 249. Congress may of course subject the use of privately owned property to reasonable limitations in order to serve valid legislative ends, even though the regulation diminishes the value of the property. Under "the police power in its proper sense, * * * property rights may be cut down, and to that extent

taken, without pay." *Block* v. *Hirsh*, 256 U. S. 134, 155.

Examples of valid legislative regulations which diminish the value of property without compensation are numerous. A state may prohibit the manufacture of an article or the conducting of a business within certain territorial limits;[23] it may prohibit the emission of smoke from buildings even though this requires the discontinuance of the use of private property and the incurring of considerable expense (*Northwestern Laundry* v. *Des Moines*, 239 U. S. 486); it may limit the use of property and even destroy it outright, in order to save or benefit another class of property "which, in the judgment of the legislature, is of greater value to the public";[24] and it may control prices in appropriate circumstances. *Nebbia* v. *New York*, 291 U. S. 502. Such reasonable restrictions on the use of property in the interest of the public are not "takings" for which just compensation must be paid. *Monongahela Bridge Co.* v. *United States*, 216 U. S. 177, 193; *Union Bridge Co.* v. *United States*, 204 U. S. 364, 388–403; *West Chicago Street Railroad Co.* v. *Chicago*, 201 U. S. 506,

[23] *Powell* v. *Pennsylvania*, 127 U. S. 678 (oleomargarine); *Mugler* v. *Kansas*, 123 U. S. 623, 661 (intoxicating liquors); *Reinman* v. *Little Rock*, 237 U. S. 171 (livery stable); *Hadacheck* v. *Los Angeles*, 239 U. S. 394 (bricks).

[24] *Miller* v. *Schoene*, 276 U. S. 272, 279–280; *Lawton* v. *Steele*, 152 U. S. 133; *cf. Standard Oil Co.* v. *Marysville*, 279 U. S. 582; *Euclid* v. *Ambler Co.*, 272 U. S. 365; *Pennsylvania Coal Co.* v. *Mahon*, 260 U. S. 393.

524; see Gardner, *The Massachusetts Billboard Decision*, 49 Harv. L. Rev. 869, 889–892.

The constitutional criteria applied to price-fixing regulations are of peculiar applicability to rate regulation. "Rate-making is one species of price-fixing. Price-fixing, like other forms of social legislation, may well diminish the value of the property which is regulated. But that is no obstacle to its validity." *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 603 (Black, Douglas, Murphy, J. J., concurring).[25]

The power of the Government to fix prices or rates was formerly explained by saying that the regulated company had "dedicated" its property to the public use, but this has been characterized

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[25] The "taking" concept has not even a superficial relevance to utility regulation except where the state requires a utility to extend its service (*New York & Queens Gas Co.* v. *McCall*, 245 U. S. 345; *New York ex rel. Woodhaven Gas Light Co.* v. *Public Service Commission*, 269 U. S. 244) or forbids abandonment if the utility continues to do business anywhere within the state. *United Gas Co.* v. *Railroad Commission*, 278 U. S. 300, 308–309. No question of forbidding abandonment or compelling an extension is involved here. Any duty on the part of Hope to continue or extend its service is in effect based upon the community's dependence, for which the utility itself is responsible. *Cf.* Cardozo, J., dissenting in *Interstate Commerce Commission* v. *Oregon-Washington R. Co.*, 288 U. S. 14, 17. The instances are numerous and familiar in which a duty has been founded on dependence or reliance and in which the concepts of eminent domain are manifestly irrelevant. See, e. g., *Moch Co.* v. *Rensselaer Water Co.*, 247 N. Y. 160, 167; *Slater* v. *Illinois Central R. Co.*, 209 Fed. 480 (C. C. M. D. Tenn.); *Siegel* v. *Spear & Co.*, 234 N. Y. 479; *Creeley* v. *Creeley*, 258 Mass. 460, 463.

as "merely another way of saying that if one embarks in a business which public interest demands shall be regulated, he must know regulation will ensue." *Nebbia* v. *New York*, 291 U. S. 502, 534. In reality there is no true "dedication," for the property remains private property. *Minnesota Rate Cases*, 230 U. S. 352, 431–432; *Interstate Commerce Commission* v. *Oregon-Washington R. Co.*, 288 U. S. 14, 40–41.

Utility regulation, and rate fixing in particular, is thus not a "taking" of property for public use but an exercise of the police power in the form of a restriction upon the use or enjoyment of private property. The validity of such regulation does not depend upon impairment of the value of property; impairment of value is frequently the consequence of regulation. The true test of constitutionality under the due process clause in a rate case, as in all regulatory cases, is simply whether the regulation is reasonable. This is the standard in the analogous field of price fixing. This Court, after observing that there was nothing "peculiarly sacrosanct about the price one may charge," has held that "price control, like any other form of regulation, is unconstitutional only if arbitrary, discriminatory, or demonstrably irrelevant to the policy the legislature is free to adopt, and hence an unnecessary and unwarranted interference with individual liberty." *Nebbia* v. *New York*, 291 U. S. 502, at 539.

*4. It is not unreasonable to limit the earnings of a utility to a fair return upon the capital prudently invested*

Measured by the principles governing the validity of regulatory acts of government, and particularly by those relating to price-fixing, the prudent-investment rate base chosen by the Commission easily passes muster.

As this Court held in considering the Natural Gas Act, the Constitution does not bind the Commission "to the service of any single formula or combination of formulas," but leaves it free, within the ambit of its statutory authority, "to make the pragmatic adjustments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. If the Commission's order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end." *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 586.

This decision leaves the regulatory body at liberty to select formulae suggested by sound business practice and producing no arbitrary result. We submit that an acceptable and reasonable formula is the prudent investment standard adopted by the Commission. This point requires little elaboration here. Mr. Justice Brandeis has demonstrated the reasonableness of the investment basis by reference to a wealth of relevant data.

See *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, 289. Additional data are supplied in the Supplement to this brief (at pp. 66–89 thereof), in which we show that the prudent investment basis of rate regulation is sound and workable, that it is overwhelmingly supported by the great body of professional opinion, and that many experienced regulatory bodies have adopted and advocated its utilization. The principal advantages of the prudent investment base will merely be briefly recapitulated at this point.

(a) Prudent investment, in contrast to present value, can be determined expeditiously, accurately, and to a degree of exactness that leaves substantially little ground for conflict between the public and private interests. Once a prudent investment rate base has been determined, the redetermination of a rate base thereafter would amount to the relatively simple task of ascertaining net plant additions, an inquiry greatly facilitated by the use of the companies' books of account and its continuing property records. The importance to the public and to investors of the simplification of the administrative problems of regulation that would follow from the adoption of prudent investment as a rate base can hardly be exaggerated.

(b) An investment base is fair and just to the utilities. Practical experience in California, Massachusetts and elsewhere shows that this method has attracted the necessary capital and

has secured adequate service. A basis of rate regulation which maintains the Company's financial integrity and permits it to raise the required capital cannot be deemed arbitrary. See Brandeis, J., concurring in *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, 291; Hale, *Conflicting Judicial Criteria of Utility Rates*, 38 Col. L. Rev. 959, 969–970.

(c) The investment base is fair to investors in the utility. The investor's contribution to public service is his capital, and he is treated equitably when he is allowed a compensatory return thereon. Public utilities usually finance a large part of their plant through issuance of bonds and preferred stocks, whose returns are contractual and fixed. Stability of investment and safety of principal are important factors to these investors.

A rate base predicated upon investment is the most stable type and is thus fair to such investors. Even as to common stock, stability of investment is obtained under prudent investment. It is merely necessary to adjust the rate of return to current costs of capital; indeed, such adjustment might well convert common stocks into gilt-edge investments, by protecting them from depreciation in value during time of depression.[26]

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[26] Under the rule of *Smyth* v. *Ames*, on the other hand, utility investors tend to receive both the benefit of appreciation in property values and protection against depreciation. This is so because in periods of deflation, regulatory agencies cannot undertake to fix values in strict conformity to *Smyth* v. *Ames* without throwing many utilities into receivership,

(d) State and federal regulation of utilities' accounts are giving increased reliability to investment figures. Appendix C to this brief (pp. 141–143 *infra*) lists the state commissions which control the issuance of securities and have prescribed accounting by utilities on an original cost or investment basis. See also *American Tel. & Tel. Co.* v. *United States*, 299 U. S. 232; *Alabama Power Co.* v. *Federal Power Commission*, 128 F. (2d) 280 (App. D. C.), certiorari denied, 317 U. S. 652; *Louisville Gas & Electric Co.* v. *Federal Power Commission*, 129 F. (2d) 126 (C. C. A. 6), certiorari denied, 318 U. S. 761.

The investment basis is the standard accounting practice used by business institutions in reporting their financial transactions to stockholders, banks and other interested parties. Because it combines

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and this would, of course, deprive consumers of necessary utility service. Bonbright, *Merits of Original Cost and Reproduction Cost*, 41 Harv. L. Rev. 593, 621–622; see Whitten, *Fair Value for Rate Purposes*, 27 Harv. L. Rev. 419, 423–424. "The rule by which the utilities are seeking to measure the return is, in essence, reproduction cost of the utility or prudent investment, whichever is the higher." Brandeis, J., in *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, 311. Since, under the practical operation of the *Smyth* v. *Ames* rule, the utilities are not compelled to suffer from a decline in values, it is not unreasonable to deny them the increase. And if some account must be taken of the factor of increasing prices as bearing upon the stability of investment, this may readily be accomplished by altering the rate of return. See Whitten, *Fair Value for Rate Purposes*, 27 Harv. L. Rev. 419, 434–435; Richberg, *A Permanent Basis for Rate Regulation*, 31 Yale L. J. 263, 273.

exactness, ease of application, and equitableness, it is the standard best adapted to modern business conditions and practices in this country.

(e) The prudent investment base is fair to consumers, by assuring them a sound and stable utility whose services will be rendered at the lowest rate consistent with the attraction of necessary capital and with a reasonable return to investors.

(f) The use of the prudent investment basis of rate regulation is the long-established practice of the Federal Power Commission,[27] and in 1940 it reported to Congress that its rate-making policy was to insist upon such a rate base (20th Annual Report of the Federal Power Commission, p. 62). Proof of the reasonableness of the method and its compliance with constitutional requirements is to be found in the fact that the Commission has obtained consent reductions in natural gas rates on this basis, exceeding $9,600,000 annually.[28] Consent reductions would hardly have been forthcoming if rates based on prudent

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[27] *Re Albany Lighting Co.*, 25 P. U. R. (N. S.) 36, 39; *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 10; *Los Angeles* v. *Nevada-California Electric Corp.*, 32 P. U. R. (N. S.) 193, 206; *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263; *Re Canadian River Gas Co.*, 43 P. U. R. (N. S.) 205, 224; *Detroit* v. *Panhandle Eastern Pipe Line Co.*, 45 P. U. R. (N. S.) 203; *Re Interstate Natural Gas Company*, 48 P. U. R. (N. S.) 267, 274.

[28] The $3,750,000 interim rate reduction approved in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, was followed by a final consent rate reduction of an additional $2,750,000 and was based on prudent invest-

investment had produced a return which the companies considered to be unreasonable and confiscatory.[28]

The rule of prudent investment thus combines exactness, ease of application, and appropriateness for determining a return fair to the utility, investors and the public. It is the standard for rate making best adapted to modern business conditions and practices in this country. Since it is clearly reasonable and produces no arbitrary result, rate regulation on the basis of prudent investment is entirely consistent with due process, in addition to being well adapted to serve the Congressional objective of producing "just and reasonable" rates. Cf. *Nebbia* v. *New York*, 291

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ment. F. P. C. Order Accepting Reduced Rates for Filing and Terminating Proceedings, September 19, 1942. Additional reductions on the prudent investment basis were obtained in the following cases: *Re Lone Star Gas Co.*, F. P. C. Docket Nos. G–208, G–209, May 4, 1942, Order Reducing Rates by $2,053,564 annually; *Re El Paso Natural Gas Co.*, F. P. C. Docket Nos. G–424, G–257, October 29, 1942, Order Reducing Rates by $526,000 annually; *Re Northern Natural Gas Co.*, Feb. 4, 1943, Order Making Effective Reductions in Rates by $2,087,000 annually; *Re Louisiana P. S. Comm.* v. *United Gas Pipe Line Co.*, F. P. C. Docket Nos. G–133, G–148, G–157, G–193, April 16, 1943, Order Making Effective Reductions in Rates by $2,195,287 annually.

[28] Under the Federal Power Act (Secs. 20 and 14), the rate base prescribed for licensed hydroelectric projects is the "net investment," which is the equivalent of prudent investment (41 Stat. 1077, 16 U. S. C. § 791). In twenty years, 128 major hydroelectric projects have been constructed at a cost of $740,000,000 (29th Annual Report, F. P. C., p. 15).

U. S. 502, 537–539. There being no constitutional objection to prudent investment on the ground of reasonableness and no statutory restriction upon its use, the Commission should be permitted to adopt that formula. See *American Tel. & Tel. Co. v. United States*, 299 U. S. 232, 244; *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 606 (Black, Douglas, Murphy, J. J., concurring). And to eliminate any doubts as to the propriety of such a rate-making method, we suggest that the so-called rule of *Smyth v. Ames*, as enunciated in the *Southwestern Bell* case, should be renounced.

## III

### THE COMMISSION PROPERLY EXCLUDED FROM ACTUAL LEGITIMATE COST THE INTANGIBLE COSTS OF WELL DRILLING AND OTHER ITEMS PROPERLY CHARGED TO OPERATING EXPENSE PRIOR TO 1923 AND FULLY RECOUPED FROM RATEPAYERS

The Commission found that Hope's actual legitimate cost amounted to $51,957,416 (before depreciation) for the property devoted to interstate sales as of December 31, 1940. The Commission declined to include in that figure an additional sum of about $17,000,000,[30] consisting largely of expenditures by Hope and the com-

[30] This $17,000,000 figure is before depreciation. After depreciation it amounts to about $4,000,000 as the court below noted (R. IV, 184).

panies from which it acquired properties, for labor and drilling equipment used in drilling wells before 1923. These expenditures, until 1923, were charged to operating expenses in accordance with the general practice in the industry.[31] The court below held the Commission's action improper, and ruled that these items must now be capitalized and reflected in the rate base, principally on the ground that they had been "erroneously charged to expense" instead of to capital (R. IV, 186–189). We believe that the ruling below embodies two fundamental errors: (1) the items in question were not in fact "erroneously" charged to expense; and (2) the decisions of this Court, principally *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 590–591, support the Commission's determination against capitalizing items, previously and properly treated as operating expenses and recovered from revenues received from ratepayers.

A. NATURE OF CONTESTED ITEMS

The actual legitimate cost of Hope's interstate properties, as determined by the Commission, was obtained by going to the books and records of the Company, which covered its entire history, and were complete and well kept. All necessary rec-

[31] In 1923, the West Virginia Public Service Commission, pursuant to its jurisdiction over intrastate rates, required Hope to charge future expenditures for well-drilling to capital (R. I, 28).

ords had been preserved; there was therefore no occasion to resort to estimates. (R. I, 174; R. III, 25–30.) In determining Hope's actual legitimate cost the Commission accepted all of the Company's book figures, making adjustments for items which were clearly wrong and about which there is no dispute.[32] The Commission thus adopted the accounting decisions of the Company's competent management made over a long period of years.

The "original cost" of Hope's interstate properties, as of December 31; 1938, as shown on the Company's books in the plant investment account, was $52,730,666. However, Hope estimated its "original cost" at $69,735,638. (R. I, 25, 197: Exh. 20, Statement B.) This figure, which is $17,004,972 more than the amount shown on its own books, included: (a) Items which have been identified as expenditures charged to operat-

[32] Two main adjustments were made to correct accounting errors. One reduced the cost, as shown by the books, by $2,057,618 on account of retirements of property which had not been recorded in the books. The Company made this inventory adjustment to correct its books and the Commission accepted it. The other adjustment, which was recommended by the Commission's staff, would restore the amount of $1,295,953 which had been arbitrarily written out of the plant accounts by the Company. (R. I, 35, 256–258.) The Commission observed that there was "considerable question" as to whether this item should be restored (R. I, 35), but because the arbitrary write-offs were contrary to sound principles of accounting, finance, and business administration and likewise contrary to the practices of the gas industry, the $1,295,953 was added to the book cost and included in the investment rate base.

ing expenses prior to December 31, 1938. Chief among these, and the largest item of difference between the Commission and Hope as to cost of plant, were expenditures for well-drilling amounting to $12,643,641. This was composed of $11,279,554 for wells drilled prior to 1923 by the Company itself, and $1,364,087 for wells drilled prior to 1923 by companies whose properties were acquired by Hope (R. I, 195; Exh. 20). Such expenditures were for labor, use of drilling-rigs, hauling, and similar costs—all known to the industry as "intangible well costs." They do not cover the cost of well equipment items, such as casing and tubing, which were included by the Commission in the "original cost." (b) Items for amounts that were never expended, such as interest during construction ($632,000), for which no charges were ever incurred. (R. I, 24, 180.) (c) Items which the Commission has already included in the rate base.[23]

Hope reached its estimate of "original cost" by ignoring its past accounting practice, instead making an inventory of all its properties, and then pricing the inventory according to prices obtained from vouchers and other documents and from engineer's estimates (R. II, 178–185, 201, 204–210).

The Commission refused to include these well-drilling and related costs in the rate base on the ground that those expenditures had been cor-

[23] The failure of the court below to notice this breakdown (R. IV, 184) was apparently an inadvertence.

rectly charged to operating expenses by the Company in accordance with the general practice of the industry; that they have already been recouped from Hope's customers; and that to include them in the rate base would result in duplicate charges (R. I, 26–29.[34] This accorded with the Commission's settled practice of accepting, in the process of determining cost or investment, books kept in the regular course of business, subject to the correction of errors found therein.

The majority below held that the entire $17,000,000 must now be capitalized and (less accrued depreciation) reflected in the rate base, because the items, "erroneously charged to expense" instead of to capital by the Company, "represent investment by the company in property which it uses in rendering the service for which rates are prescribed" (R. IV, 184–185, 189).

We submit that the court erred because (1) the items in question were properly charged to expense, and (2) since Hope has been reimbursed for them out of operating expenses, they do not represent investment on which Hope is entitled to a return. Since the intangible costs of well-drilling constitute more than $12,500,000 of the $17,000,000 involved, and present Hope's

[34] Although the Commission's present System of Accounts provides for the capitalization of such costs, it explicitly prohibits the reaccounting for items properly charged to expense in the past (R. I, 234–238; Ex. 58, R. III, 48).

contentions in their most favorable light, the following discussion and analysis will be in terms of these costs.

B. PRIOR TO 1923, HOPE INTENTIONALLY AND PROPERLY CHARGED WELL-DRILLING COSTS TO OPERATING EXPENSES

As the Commission found in accordance with the evidence, it was Hope's "consistent practice * * * up to 1923 to charge the cost of drilling wells to operating expense" (R. I, 27, 251–254; R. II, 173–177, 181). This reflected the almost universal practice not only of natural gas companies but of all extractive industries (R. I, 276–277), as Hope's chief accounting officer, who had been with the Company for many years, and the Commission's witnesses testified (R. II, 173–174; R. I, 253–256). Thus, in 1919, the Natural Gas Association of America opposed a provision in the first Uniform System of Accounts for Natural Gas Companies requiring the classification of well-drilling expenditures as plant costs, basing its opposition on the ground that such expenditures were incurred to maintain the business rather than to add to it (R. I, 255). And in 1921, Hope itself contended before the Public Service Commission of West Virginia that well-drilling costs should be treated as expense, and succeeded in obtaining permission so to charge them, thereby raising its rates to local consumers. *Re Hope Natural Gas Company*, P. U. R. 1921 E, 418, 433, 440. In that ruling the West Virginia

Commission observed that the failure of natural gas companies to capitalize well-construction expenses was commonly explained as follows: Since drilling expenses are incurred in an attempt to maintain sufficient gas production to meet demands, and since "notwithstanding such drilling, its available supply of gas is constantly and rapidly decreasing each year, * * * at least a part of the cost of maintaining this failing supply should be borne by consumers for the period within which such additional investment is made." *Re Hope Natural Gas Co.*, P. U. R., 1921 E, 418, 440.

However, in 1922, scarcely more than a year after its decision, the State commission issued a Uniform System of Accounts for all natural gas companies subject to its jurisdiction, including Hope, requiring them to charge expenditures for well-drilling to capital on and after January 1, 1923 (R. II, 174; R. I, 28). Hope accordingly changed its accounting procedure for these expenditures, not to correct any error, but rather to comply with the uniform system of accounts, to promote uniformity in the future. This change in accounting also recognized the progress then being made in gas and oil exploration and in drilling methods, which was bringing about the discovery of huge resources formerly unknown and unavailable and thus was removing the fear of rapid decrease in supply—the *raison d'être* of the former accounting procedure.

The propriety of Hope's accounting procedure up to 1923, as to well-drilling items, has been recognized by the Bureau of Internal Revenue. Questions as to the proper treatment of these expenditures have arisen under Section 212 (b) of the Revenue Act of 1918 (40 Stat. 1057, 1064–1065), which provided generally that the taxpayer's method of keeping books was to be accepted by the Commissioner of Internal Revenue, unless he found that method to be wrong. Under this provision, the Commissioner has allowed the taxpayer the option of capitalizing such items or charging them as ordinary and necessary operating expenses, provided that consistency is maintained. Income Tax Regulations, Reg. 103, Secs. 19.23 (m)–15 (b) (3); 19.23 (m)–16 (a) (1). This tax rule is still in effect, and most natural gas companies, including Hope, continue to charge such expenditures as operating expenses for income tax purposes (R. I, 255; R. II, 176).[35]

Since the intangible costs of well-drilling incurred prior to 1923 had already been properly charged by Hope to operating expenses, the Com-

[35] Even today, some oil companies still follow the practice of charging the intangible costs of well-drilling to operating expense for general accounting purposes (R. I, 254–256). This is in accordance with the general policy of conservatism, adhered to in extractive businesses, which frequently charges to expense items which in other industries would be charged to capital (R. I, 256). Cf. *Marsh Fork Coal Co.* v. *Lucas*, 42 F. (2d) 83 (C. C. A. 4); *Commissioner of Internal Revenue* v. *Brier Hill Collieries*, 50 F. (2d) 577 (C. C. A. 6).

mission properly refused to permit Hope now to renounce its own voluntary accounting practice, and to present the same items as capital expenditures in order to derive the benefit of an increased rate base.

C. THE WELL-DRILLING COSTS WERE FULLY RECOVERED THROUGH RATES AND SHOULD NOT NOW FORM A BASE FOR FURTHER ANNUAL RETURN

As we have shown, the practice of charging well-drilling costs directly to expense was common to the whole gas industry, and represented a managerial decision as to allocation of expenditures. Such a decision, like other managerial determinations as to allocation of costs, affects the operating figures of the utility and is bound to be reflected in the rates. Certainly Hope in fixing rates was influenced by the common managerial desire to recover all its costs, and these, prior to 1923, included well-drilling expenses. Indeed, the inclusion of these expenses was one of the means which Hope utilized to obtain a higher rate to consumers in West Virginia in 1921.[36] There can be little

[36] Even during the unregulated period, Hope as a public utility was required by the common law not to charge more than a just and reasonable rate. *Munn* v. *Illinois*, 94 U. S. 113, 126–127, 133; *Chicago, B. & Q. R. R. Co.* v. *Iowa*, 94 U. S. 155, 162. And the local commission could scrutinize the charges from Hope to the intrastate utilities in order "to prevent imposition upon the community served by the latter" (cf. *Houston* v. *Southwestern Tel. Co.*, 259 U. S. 318, 323), or in order to ascertain whether there is bad faith. Cf. *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, 288.

doubt, therefore, that during the period when Hope was charging the costs of well-drilling to operating expenses, that is from the Company's inception in 1898 up to 1923, Hope fully recouped the costs of well drilling. During this 25-year period, Hope was earning an annual average return of 15% on its average invested capital[37] (R. I, 34; R. III, 13–14), which is of course the return after meeting all annual operating expenses including well-drilling costs.

The decision of this Court in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, is in fact dispositive of this question, as was pointed out by the dissenting judge below (R. IV, 205–207). In the *Pipeline* case, involving an interim rate order under the Natural Gas Act, the Commission, solely for the purpose of that order, had "reluctantly" accepted as the rate base the Company's estimate of the value of all physical property—including excess capacity—calculated at reproduction cost new. The Company, however, sought to include in the rate base, *inter alia*, the costs of maintaining the excess capacity during the unregulated period, costs which had already been charged to operating expense. This the Commission rejected, and its determination was approved by this Court. The rationale expressed in the opinion (315 U. S. at 590–591) is closely

[37] The term "invested capital" is used to include capital stock and earned surplus. Hope's entire capital structure consists of common stock.

apposite here: Since the Company had treated these items as operating expenses to be compensated from earnings, and since the history of the Company before regulation showed an average annual return of 8% on the undepreciated investment, it could not be said "that the Commission has deprived the companies of their property by refusing to permit them to earn for the future a fair return and amortization on * * * *costs which the companies fail to show have not already been recouped from earnings* before computing the substantial 'net profits' earned during the first seven [unregulated] years." [Italics supplied.] This Court found it significant that the Company had "charged the out-of-pocket cost of maintenance of plant * * * as operating expenses deductible from net earnings before arriving at net profits", and pointed out the want of a showing "that the items which have never been treated as capital investment, have not been recouped during the unregulated period." See, also, *Natural Gas Co.* v. *Public Service Commission*, 95 W. Va. 557, 571, 121 S. E. 716, 723; *Peoples Gas Light & Coke Co.* v. *Slattery*, 373 Ill. 31, 25 N. E. (2d) 482, 493, appeal dismissed, 309 U. S. 634.[38]

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[38] In addition to the cases quoted, *supra*, the following also prohibit reaccounting and support the principles employed by the Commission.

*Los Angeles Gas & Electric Corp.* v. *R. R. Comm'n*, 58 F. (2d) 256, 261, 267. (S. D. Cal.), affirmed, 289 U.S. 287; *North-*

As was true of the Company in the *Pipeline* case, Hope charged the items in question to operat-

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*western Electric Co.* v. *Federal Power Commission*, 125 F. (2d) 882, 887 (C. C. A. 9); *cf. Helvering* v. *Wilshire Oil Co.*, 308 U. S. 90, 95, 97–99; *Chicago & N. W. R. Co.* v. *Commissioner of Internal Revenue*, 114 F. (2d) 882, 886, certiorari denied, 312 U. S. 692.

A large number of rate-making bodies take the same view. *Elgin, Joliet & Eastern Ry. Co.*, 84 I. C. C. 587, 592; *Re Northwestern Electric Co.*, 36 P. U. R. (N. S.) 202, 208; *Re Canadian River Gas Co.*, 43 P. U. R. (N. S.) 205, 214; *San Francisco* v. *Pacific Gas & E. Co.*, P. U. R. 1918A, 506, 521; *Re Los Angeles Gas & E. Corp.*, P. U. R. 1931A, 132, 143; P. U. R. 1933E, 317, 323; *Re Leadville Water Co.*, P. U. R. 1921D, 172, 183; *Re Potomac Electric Power Co.*, P. U. R. 1917D, 563, 606; *Re Hawaiian Electric Co. Ltd.*, 33 P. U. R. (N. S.) 161, 165; *Re Kootenai Power Co.*, P. U. R. 1924E, 831, 833; *Illinois Commerce Comm'n* v. *Pub. Serv. Co. of No. Illinois*, 4 P. U. R. (N. S.) 1, 21; *Illinois Commerce Comm'n* v. *Commonwealth Edison Co.*, 15 P. U. R. (N. S.) 404, 405; *Re Peoples Gas Light & Coke Co.*, 19 P. U. R. (N. S.) 177, 196; *Re Indianapolis Water Co.*, P. U. R. 1919A, 448, 479; *Re Central Maine Power Co.*, P. U. R. 1918C, 792, 796; *Re Eaton Rapids*, P. U. R. 1922D, 94, 104; *Re West St. Louis Water & L. Co.*, P. U. R. 1922E, 805, 819; *Aluminum Goods Mfg. Co.* v. *Laclede Gas Light Co.*, P. U. R. 1927B, 1, 14; *Pub. Serv. Comm'n* v. *Montana P. Co.*, P. U. R. 1924B, 364, 372; *Hermann* v. *Newton Gas Co.*, P. U. R. 1916D, 825, 843; *Moritz* v. *Edison Electric Illum. Co.*, P. U. R. 1917A, 364, 390; *Maries* v. *Flatbush Gas Co.*, P. U. R. 1920E, 930, 1004; *Re New York State Rys.*, P. U. R. 1922B, 75, 79; *Re Westchester Lighting Co.*, 15 P. U. R. (N. S.) 299, 310; *Re Brooklyn Borough Gas Co.*, 21 P. U. R. (N. S.) 353, 371; *Public Util. Comm'n* v. *Duquesne Light Co.*, 20 P. U. R. (N. S.) 1, 10; *Pub. Util. Comm'n* v. *Peoples Natural Gas Co.*, 43 P. U. R. (N. S.) 82, 109; *Re Clarksburg Light & H. Co.*, P. U. R. 1917A, 577, 598, P. U. R. 1928B, 290, 296; *Re West Virginia Central Gas Co.*, P. U. R. 1918C, 453, 464, P. U. R. 1924E, 24, 34; *Re Mondovi Telephone Co.*, P. U. R. 1933B, 319, 321, P. U. R. 1933D, 142, 144; *Re Reedsburg Telephone Co.*, 7

ing expenses, received a substantial return on its investment, and has not shown that the items were not fully recovered. Since Hope is unable to show "with the clarity and definiteness befitting the cause" (*Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 164, 169; *Los Angeles Gas Co.* v. *R. R. Comm'n*, 289 U. S. 287, 304, 305; *St. Joseph Stock Yards Co.* v. *United States*, 298 U. S. 38, 53) that these expenditures "have not already been recouped from earnings," the Commission's refusal to permit Hope to earn for the future a fair return and depreciation on these expenditures cannot be said to deprive it of its property. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 590, 591; *Des Moines Gas Co.* v. *Des Moines*, 238 U. S. 153, 166.

The ground upon which the court below held that these costs belong in the rate base, was that (R. IV, 185) "the wells are existing property used by the utility in its service to the public. The items entered into their cost just as truly as if they had been charged to capital account" (quoting Mr. Justice Brandeis' definition of original cost as "the amount actually paid to establish the utility." *Southwestern Bell Telephone Co.* v. *Public Service*

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P. U. R. (N. S.) 389, 395. See also *Statement Relating to the Original Cost and Reclassification of Utility Plant Pursuant to the Provisions of Uniform Systems of Accounts for Electric, Gas and Water Utilities*, by the Committee on Statistics and Accounts of the National Association of Railroad and Utilities Commissioners, September 20, 1940.

*Commission,* 262 U. S. 276, 295). This reasoning, however, confuses cost with return, and overlooks the basic principle that Hope is entitled to a return only on that part of costs which have not been and are not currently being returned to it through operating expenses. The intangible costs of well drillings may be part of Hope's costs in establishing the utility, but Hope is entitled to a return on those costs only so long as its investment therein has not been fully recouped. There is no principle which would entitle it to a continuing return on an item of property whose cost has been fully recovered from the rates received, and which thus does not represent an investment, even though the property involved remains in use.

The effect of Hope's practice of charging the intangible well-drilling costs to operating expense was to require the customers to pay not only for the current service being rendered to them but also to contribute the amount of these costs to the capital of the company. Cf. *Re West Virginia Central Gas Co.,* P. U. R. 1924 E, 24, 34–35. Since the customers have in effect financed these well-drilling expenditures, their capitalization in the rate base would violate the long-established rule that a utility should not be permitted a return on property constructed and financed with customer contribution. (*Louisiana R. R. Comm.* v. *Cumberland Tel. & Tel. Co.,* 212 U. S. 414, 424, *et seq.*; *cf. Lindheimer* v. *Illinois Bell Telephone Co.,* 292

U. S. 151, 169, 174; *Detroit Edison Co.* v. *Commissioner of Internal Revenue*, 319 U. S. 98). And since it is "the actual cost of the property—the investment the owners have made" (*Los Angeles Gas Co.* v. *R. R. Comm'n*, 289 U. S. 287, 306) with which we are here concerned, it was proper for the Commission to forbid the capitalization of these items.

Contrary to the view of the court below, there is nothing in *Board of Public Utility Commissioners* v. *New York Telephone Co.*, 271 U. S. 23, which prohibits the Commission from excluding intangible well-drilling costs from the rate base. In that case, the Public Utility Commission found that the Telephone Company had been taking excessive annual depreciation allowances, and the Commission attempted to absorb such excess by imposing rates which would reduce the prospective depreciation allowances of the Company below the *actual* rate of depreciation. This Court thought this to be error, holding that "the law does not require the company to give up for the benefit of future subscribers any part of its accumulations from past operations. Profits of the past cannot be used to sustain confiscatory rates for the future" (271 U. S. at 32).

That case is plainly inapplicable here. The Commission has not attempted here to impose prospective confiscatory rates in order to absorb past excessive profits; it has merely refused to allow Hope to capitalize expenditures already

recouped and thereby prospectively to earn excessive profits through an annual return and depreciation allowance on such expenditures. The *New York Telephone* case involved an order by the regulatory body directing "the company to make up current losses out of reserves accumulated from the past"; it raised no question "in regard to including property in the rate base which had theretofore been paid for out of operating expenses." *Wheeling* v. *Natural Gas Co.*, 115 W. Va. 149, 160, 175 S. E. 339. The distinction is between a rate producing less than a fair return in order *to equalize past* excessive profits, which was presented in the *Telephone* case, and a rate producing a fair return on investment from which fully recouped items have been excluded in order *to prevent future* excessive profits, which we believe is presented here.

The *Telephone* case is not apropos for an additional reason. Since its effect is to enable the Company to accumulate more than sufficient to replace the property at the end of its service life and thereby earn more than a fair return, the rule of that case would not apply to "wasting asset businesses of limited life," such as the natural gas industry, for there "the Constitution does not require that the owner * * * shall receive at the end more than he has put into it." *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. at 593.

D. PRACTICAL CONSIDERATIONS SUPPORT THE COMMISSION'S EXCLUSION OF THESE ITEMS FROM THE RATE BASE

As a practical matter, it is fundamental to effective rate regulation that a proper decision once made as to accounting policy be binding as to all past transactions thereunder. In utilities as in other enterprises, lines of demarcation, although clear in theory, are frequently "difficult * * * to observe in practice with scientific precision" (*Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 173), and, therefore, much discretion must be exercised even with accepted principles and practices as guides.

For example, there are items in the Commission's present System of Accounts whose treatment is borderline. The costs of exploration and development, as an illustration, are treated as current expenses. Such costs, involving expenditures for delay rentals, nonproductive well-drilling, and related matters, are necessary to maintain production. The Chief of the Commission's Bureau of Accounts, Finances and Rates testified that there was considerable support in accounting theory for capitalizing such expenditures, but because the practice of the industry was to treat them as expenses, he recommended that the Commission approve that method. (R. I, 259–260.) The Commission consequently allowed $600,000 as annual expenses for exploration and development (R. I, 53–54, 65), and Hope has raised no objection thereto. But if it is successful in its claim

for the retroactive capitalization of well-drilling expenditures, there is no reason why similar claims could not be successfully prosecuted in a future rate case to capitalize exploration and development costs which are now allowed as expenses. And over a period of years the latter costs would greatly exceed the well-drilling costs. Again, under the Commission's System of Accounts, Hope may elect to charge administrative and general costs to expenses, or to capitalize them. Hope informed the Commission that it chose the former alternative; hence the Commission allowed the Company $138,018 in 1940 operating expenses (R. I, 49–50). It would be manifestly wrong to permit Hope to capitalize the same costs in some future rate case.

To permit renunciation by a company of its own accounting practice would invite juggling of items many years after their occurrence, in any manner likely to benefit the utility. For example, in asserting a right to capitalize the well-drilling expenses here involved, Hope rejects its own past accounting practice of many years' standing, impeaches its books kept competently for a long period of years, nullifies the decisions of its management, and impugns financial statements and reports properly and correctly made by the Company in the past to the tax authorities, to regulatory commissions, and to the public generally (R. I, 31; R. II, 173–176). It substitutes the figures of a specially engaged witness, who

admittedly knows nothing about the practices and policies of Hope or the industry (R. II, 178–370). Mr. Antonelli, who was the Company's "expert" on this subject, admitted that he was not an accountant, that he was unfamiliar with the operations of the Company, and that he was not concerned with the accounting practices of the Company nor with its management's decisions or policy in the past regarding the classification of expenditures between operating expenses and plant (R. II, 315).[39] It is this calibre of expertise which, if the Commission's action is overturned, would be invoked to resuscitate ancient items charged to operating expenses, and to tender them as items of capital for which the rate payer must pay an annual charge.

E. REMAINING ITEMS EXCLUDED FROM THE RATE BASE

The remaining items, totalling some $4,500,000, which the Commission excluded from original cost, were made up of overhead charges and minor items of property. The former arise largely from the exercise of *nunc pro tunc* judgment in the allocation of expenditures between plant-investment and expenses. There is even less reason for permitting readjustment here than in the case of items which are at least arguably related to capital investment.

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[39] Even he was obliged to admit on cross-examination that the retroactive capitalization of such items was improper (R. II, 326–327).

The minor property items consist largely of the estimated cost of minor structures, such as sheds and toolhouses, for which separate accounting entries were not made. This accorded with proper accounting standards, for these items were not separately identified in the plant investment account and were merely subsidiary to main structures which were so identified (R. III, 32). The items in question have been charged either to investment or expense. If to investment, they are already in the rate base, although not so identified. If to expense, they were properly treated as expendable and should not be included in the rate base for the reasons discussed above in connection with well-drilling expenses.

As for the item of $632,000, consisting of interest during construction which was never incurred, little need be said. Even in reproduction cost estimates, this Court has approved the disallowance of hypothetical costs which were never incurred by the utility. *Los Angeles Gas Co.* v. *R. R. Comm'n*, 289 U. S. 287, 310; *Wabash Valley Electric Co.* v. *Young*, 287 U. S. 488, 500.

## IV

### THE COMMISSION PROPERLY USED THE ECONOMIC-SERVICE-LIFE PRINCIPLE IN DETERMINING ACCRUED DEPRECIATION AND DEPLETION

In determining the proper rate base, the Commission first computed the original cost of Hope's

interstate properties, and then deducted therefrom the accrued depreciation. The Commission rejected, as being without merit, the observed-depreciation method employed by the Company, and instead applied the economic-service-life principle to the cost of the property, resulting in a figure of $22,328,016 for accrued depreciation and depletion (R. I, 10, 45, 50).

The lower court condemned these findings of the Commission on the grounds that they were based on cost rather than present value of the property, and that they neglected the actual condition of the property for "theoretical formulas" (R. IV, 189).

At this point we argue that the formulas condemned by the lower court are in accord with the accepted views as to the nature of depreciation and the proper method of accounting therefor. The propriety of the cost basis used for this purpose is discussed in detail in Point V of this brief, pp. 99–108 *infra*.

The economic-service-life principle for determining accrued depreciation reflects the view, now accepted by almost all informed opinion, that depreciation is the diminution of the service capacity of the property or, in terms of the monetary measure of the original service capacity, the diminution in service value. See *Proceedings of the National Association of Railroad and Utilities Commissioners*, 1938, pp. 441–443; *id.* 1943 (Report of Committee on Depreciation) p. 30; *Depre-*

*ciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 372–382. This is the uniform conclusion of all rate-making agencies, both federal and state.[49] It is also the view

[49] *Uniform System of Accounts for Natural Gas Companies* promulgated by the Federal Power Commission, effective January 1, 1937, defines depreciation as "the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities, and, in the case of natural gas companies, the exhaustion of natural resources." Service value is defined as "the difference between original cost and net salvage value." See also *Uniform System of Accounts for Class A and Class B Telephone Companies* promulgated by the Federal Communications Commission, effective January 1, 1937; *Uniform System of Accounts for Electric Utilities* promulgated by the Federal Power Commission, effective January 1, 1937; *Uniform System of Accounts for Electric Utilities* recommended by the National Association of Railroad and Utilities Commissioners (1936); *Uniform System of Accounts for Natural Gas Companies* recommended by the National Association of Railroad and Utilities Commissioners. Twenty-seven States have adopted the Federal Communications Commission system for Class A and Class B telephone companies identically; eight have adopted it substantially; no system is prescribed in the other States. See Federal Communications Commission Release, August 18, 1941. *Accounting Systems Prescribed by the States for Use of Telephone Companies.* Similar systems have been adopted by the majority of States for electric and gas utilities. See *State Commission Jurisdiction and Regulation of Electric and Gas Utilities*, published by the Federal Power Commission, January 1941, pp. 11, 35.

expressed by this Court in *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 167. This view of depreciation is based on the simple principle that the economic value of property—its ability to earn a return—consists of the total units of useful service which it is capable of producing. Thus, investments are made in physical property solely because of the economic service which it will render, and the investments represent cost of stored-up services. It is the using up of these economic services, referred to as service capacity, service life, or economic life, that is depreciation (R. I, 375–377). Paton and Littleton, *An Introduction to Corporate Accounting Standards*, p. 84; Porter and Fiske, *Accounting*, p. 406; Taussig, *Principles of Economics*, Vol. I, p. 70; *Proceedings of the National Association of Railroad and Utilities Commissioners* (1938) pp. 441–445; *id.* (1943) p. 91; *Depreciation Charges, of Telephone and Steam Railroad Companies, loc. cit. supra*, pp. 90–91.

The annual depreciation is thus the amount of the service capacity which has been consumed in any one year. Such consumption is as much a cost of operation as fuel or any other property which is totally consumed, physically and economically, during the year; and the annual depreciation cost is thus an operating charge properly to be met from current revenues. Cf. *Illinois Central Railroad* v. *Interstate Commerce Commission*, 206 U. S. 441, 462.

It is for this reason that in fixing reasonable rates there should be included in "operating expenses, that is, in the cost of producing the service, an allowance for consumption of capital * * *." *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 167.

The main purpose of depreciation accounting is to determine as accurately as possible the cost of property consumed in operations during a given period such as a year. The annual allowance for depreciation therefore compensates for the economic consumption of capital during that year and maintains the integrity of the investment in the service rendered. The reserve requirement on any selected date should be a measure of the extent to which the service lives of the properties have expired and therefore is properly the total of the annual provisions for depreciation less actual retirements of property. The preferred depreciation method is known as the "straight-line-basis". See *Report of the Committee on Depreciation*, National Association of Railroad and Utilities Commissioners, 1943, p. 91.

The method is equally applicable to both depreciation and depletion, and to ascertain the depreciation and depletion reserve requirements of Hope, the Commission utilized this "straight-line-basis". The Commission obtained estimates of the over-all or average service lives of the property by classes, from a qualified staff engineer who made a detailed inspection of the present

physical condition of the property as an aid to these determinations (R. I, 42; R. III, 157–158);[41] those average service lives were converted into depreciation rates and then applied to the "service value" of the property[42] to determine the por-

[41] The lower court, in condemning the Commission's findings as to accrued depreciation for allegedly failing to reflect the present condition of Hope's properties (R. IV, 189–193), overlooked this inspection of these properties. As pointed out in the minority opinion, the consideration given to present condition "as a guide for estimating the property's service life" and the annual depreciation expense to be allowed, is clearly adequate (R. IV, 205). *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 593–595; see Brief for the Federal Power Commission and Illinois Commerce Commission, Nos. 265 and 268, October Term, 1941, p. 86 *et seq.* Moreover, there is substantial evidence in the record to show that studies were made of Hope's retirement experience and maintenance policies over its entire history, to aid in the determination of accrued depreciation (R. III, 158 *et seq.*). Cf. *Depreciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 406–408; *Smith* v. *Illinois Bell Tel. Co.*, 282 U. S. 133. The resulting determinations thus "meet the controlling test of experience." *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 170.

[42] The depreciation rates are not applied to the original cost of the property, but rather against its "service value." The latter is determined by subtracting from original cost the salvage value of the property, that is, the amount which would be received for property retired after the expiration of its service life (R. III, 155). Thus property which cost $1,000 originally, with a salvage value of $100 at the expiration of its full service life, would have a "service value" of $900. Hence, if 90% of its service life has expired, the property would be valued at $190 (i. e., 10% of its service value, or $90, plus its ultimate salvage value of $100). Nevertheless, the lower court found that the Commission had in some cases determined depreciated value to be less

tion of the cost which had expired in rendering service (R. I, 41–43; R. III, 157–174, 184–197). To illustrate the application of this formula to compute depreciation and depletion: If a well which will produce 10,000,000 M. C. F. during its life had already produced 1,000,000 M. C. F., 1/10 of the investment in such production facilities has been consumed in operation, requiring that 1/10 of its cost be recorded as an expense, and be deducted from cost as depreciation. So also, if a pipeline which will last 20 years had been in use for one year, 1/20 of its economic life is considered expired; accordingly, 1/20 of the cost should be recorded as an expense and deducted from the cost of the pipeline as depreciation.[43]

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than "salvage value." Aside from the mathematical impossibility of such a result, the so-called "salvage value" used by the lower court represented the value of property "when removed from its wells or lines and held for further use" (R. IV, 189). The application of the term "salvage" to the value of such property is a misnomer, for since its service life had not expired, its value at that time represented more than salvage value. Moreover, in condemning the Commission's results, the court relied on figures obtained from Hope's "per cent condition" study, which had already been demonstrated by the Commission to be defective and unreliable (R. I, 37–38). Cf. *Los Angeles* v. *Southern California Telephone Co.*, 14 P. U. R. (N. S.) 252, 273; *Re Rochester Gas & Electric Corp.*, 33 P. U. R. (N. S.) 393, 468–490; 1 Bonbright, *The Valuation of Property*, 205.

[43] As a natural consequence of these methods, depreciation expense and accrued depreciation are harmonized. Failure to insist on such correlation frequently results in depreciation reserve in excess of the amount required to restore or

The formula used by the Commission to determine accrued depreciation and depletion and annual allowance therefor has been analyzed and approved by this Court. *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 167, 168; *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575. The latter decision specifically approved use by the Commission, under the Natural Gas Act, of the so-called amortization method of depreciation, and upheld an "annual amortization allowance [which] if applied over the entire twenty-three-year life of the business, is sufficient to restore the total capital investment, at the end," from earnings. 315 U. S. at 594.[44]

The formula espoused by the Commission finds a wealth of administrative and expert support. The Interstate Commerce Commission and the Bureau of Internal Revenue have also approved the

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replace the equipment. *Louisiana R. R. Comm.* v. *Cumberland Tel. & Tel. Co.*, 212 U. S. 414; *Lincoln Gas Company* v. *Lincoln*, 223 U. S. 349; *Clark's Ferry Co.* v. *Commission*, 291 U. S. 227; *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151; *St. Joseph Stock Yards Co.* v. *United States*, 298 U. S. 38; *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575.

[44] Fundamentally, both amortization as used by the Commission in the *Pipeline* case, and straight line depreciation as used by the Commission in the instant case, involve application of the economic-service-life principle. There is likewise no difference in the ultimate result. See Bauer & Gold, *Public Utility Valuation*, p. 199 *et seq.*; Barnes, *The Economics of Public Utility Regulation*, p. 263 *et seq.*

"straight-line" depreciation method.[45] The Special Committee on Depreciation of the National Association of Railroad and Public Utilities Commissioners has recommended it for accounting and regulatory purposes because it is practical and "equitable to the utility, the customer and the investor." Report of Committee on Depreciation, National Association of Railroad and Utilities Commissioners (1943) p. 91. And most

proval of the courts, the Commission's methods of determining actual accrued depreciation and depletion.[46]

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[45] *Depreciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 408, 413. The Bureau of Internal Revenue sanctions the straight-line and unit-of-production methods, because they are accurate, simple, self-correcting, administratively desirable and facilitate verification. U. S. Treasury Department, Bureau of Internal Revenue, Bulletin "F" (January 1931, revised January 1942), pp. 4–5.

[46] *Joplin Gas Co.* v. *Public Service Commission*, 296 Fed. 271, 278 (W. D. Mo.); *New York Telephone Co.* v. *Prendergast*, 36 F. (2d) 54, 66 (S. D. N. Y.); *International Railway Co.* v. *Prendergast*, 1 F. Supp. 623, 629 (W. D. N. Y.); *Pacific Gas & Electric Co.* v. *Devlin*, 203 Pac. 1058, 1062 (Cal.); *State ex rel. Oregon-Washington Water Service Co.* v. *Hoquiam*, 286 Pac. 286, 290 (Wash.); *Long Island Lighting Co.* v. *Maltbie*, 292 N. Y. S. 807, 809 (App. Div.); *Yonkers Railroad Co.* v. *Maltbie*, 296 N .Y. S. 411, 416 (App. Div.); *Depreciation Charges of Telephone and Steam Railroad Companies*, 118 I. C. C. 295, 356; *Re Interstate Power Company*, (F. P. C.) 32 P. U. R. (N. S.) 1, 11; *Re Chicago District Electric Generating Corp.*, (F. P. C.) 39 P. U. R. (N. S.) 263, 275; *Re Canadian River Gas Co.*, (F. P. C.) 43 P. U. R.

If additional argument were needed to justify the Commission's depreciation and depletion formula, it is to be found in the fact that Hope had set up in its reserve for depreciation and depletion an amount ($45,930,668) which was substantially greater than the actual depreciation and depletion as determined by the Commission in accordance with the straight-line method.[47]

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(N. S.) 205, 219; *Detroit* v. *Panhandle Eastern Pipe Line Co.*, (F. P. C.) 45 P. U. R. (N. S.) 203; *Re Los Angeles Gas & E. Corp.*, (Cal.) P. U. R. 1931A, 132, 152; *Re Hawaiian Electric Co. Ltd.*, (Ha.) 33 P. U. R. (N. S.) 161, 170; *Louisiana Pub. Serv. Comm.* v. *Southern Bell Tel. & Tel. Co.*, (La.) 8 P. U. R. (N. S.) 1, 12; *Re Central Light & Power Co.*, (N. D.) 37 P. U. R. (N. S.) 106, 112; *Re Northwestern Bell Telephone Co.*, (Neb.) 11 P. U. R. (N. S.) 337, 345; *Re Upstate Telephone Corp. of N. Y.*, (N. Y.) 13 P. U. R. (N. S.) 134, 153; *Re New York Telephone Co.*, (N. Y.) P. U. R. 1926 E, 1, 39; P. U. R. 1930C, 325, 337, 345; 14 P. U. R. (N. S.) 443, 448; *Re Long Island Lighting Co.*, (N. Y.) 18 P. U. R. (N. S.) 65, 137, 191; *Re Rochester Gas & Electric Corp.*, (N. Y.) 33 P. U. R. (N. S.) 393, 489, 503; *Re Southwestern Bell Telephone Co.*, (Okla.) 9 P. U. R. (N. S. 113, 138; *Re Northwestern Electric Co.*, (Ore.) P. U. R. 1933A, 493, 512. See also Report of the Federal Communications Commission on the Investigation of the Telephone Industry in the United States, House Document No. 340, 76th Cong., 1st Sess., p. 347 (1939); Wheat, *The Regulation of Interstate Telephone Rates*, 51 Harv. L. Rev. 846, 866 (1938); Mason, *Principles of Public Utility Depreciation*, p. 103 (1937.; *Depreciation—A Review of Legal and Accounting Problems*, Wisconsin Public Service Commission, pp. 109–121 (1933); 2 Bonbright, *The Valuation of Property* (1937), p. 1140; Proceedings of National Association of Railroad and Utilities Commissioners (1938), pp. 472–474.

[47] Hope, by the end of 1940, had accumulated a depreciation reserve of $45,930,668 (including $7,552,918 transferred to

Inasmuch as the amount found by the Commission came to some $24,000,000 less than the reserve accrued on Hope's books—a reserve representing Hope's own judgment as to the amount of investment which has been returned on account of depreciation and depletion—the Commission's result is hardly arbitrary or confiscatory.

## V

### THE COMMISSION PROPERLY USED A PRUDENT INVESTMENT BASE IN DETERMINING THE ANNUAL ALLOWANCE FOR DEPRECIATION AND DEPLETION

Applying the economic-service-life principle discussed above to the cost of Hope's properties, the Commission recognized an annual depreciation and depletion allowance of $1,460,037 as an operating expense (R. I, 36–45, 51–53). That annual

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surplus) (R. I, 81; R. III, 176). The Commission, however, deducted only $22,328,016, roughly $24,000,000 less. One of the Commissioners dissented, asserting that the full amount accrued by the Company should be deducted. *New York Telephone Co. v. Prendergast*, 36 F. (2d) 54, 66 (S. D. N. Y.); *Re Southwestern Bell Tel. Co.*, 9 P. U. R. (N. S.) 113, 118, 138, affirmed, 71 P. (2d) 747, 751; *Louisiana Pub. Serv. Comm. v. Southern Bell Tel. & Tel. Co.*, 8 P. U. R. (N. S.) 1, 12, affirmed, 174 So. 180, 189; *Re Northwestern Electric Co.*, P. U. R. 1933 A, 493, 512. However, the Commission's action is consistent with its policy in rate regulation, of deducting only actual accrued depreciation irrespective of the past provisions made by the company (R. I, 39–40). On this view, since accrued depreciation is the criterion, business and accounting practice in making provision for the cost of operation represented by the consumption of service life is immaterial.

allowance was determined by the same methods used to ascertain the accrued depletion and depreciation actually existing in the properties: depreciation expense was computed by the straight-line method; depletion expense was computed by the unit-of-production method, thus varying with the actual amount of gas produced. The annual rates thus obtained for depreciation and depletion were then applied to the actual legitimate cost of the property (the investment) to give the annual allowance for depreciation and depletion. As the Commission stated, it was necessary to use the same method and base for computing the accrued depreciation and depletion, and for computing the future annual allowance therefor, because the annual allowance measures the economic-service-life of the utility's property consumed in one year, whereas accrued depreciation, being the sum of the depreciation allowances made in the past, measures on a given date the expiration of the service-life of the property. Consequently, the annual depreciation and depletion allowance must be correlated with the accrued depreciation and depletion in order to avoid injustice both to the utility and to the rate payer. (R. I, 37, 52.)

Relying on *United Railways* v. *West*, 280 U. S. 234, 253–254, the court below condemned the Commission's action in computing the annual allowance upon the basis of actual legitimate cost, and held that the allowance should have been based

upon the "present fair value" of Hope's physical property (R. IV, 192–198). This holding is indefensible, we submit, whether or not we are right in our view that the rule of *Smyth* v. *Ames* is no longer law.

If the doctrine of *Smyth* v. *Ames* is no longer controlling, as we have argued above (pp. 49–70), there can be no possible doubt as to the validity of the Commission's use of a prudent investment base to determine accrued depreciation and annual depreciation allowance, just as it may be used for the computation of a fair return. However, we submit that under the decisions of this Court, the Commission's action in this respect is proper even if the rule of *Smyth* v. *Ames* is still applicable to the rate base.

In *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, this Court approved the Commission's use of the actual cost, rather than the reproduction cost, of the utility's property as the base to be amortized by annual allowances in operating expenses. This Court agreed with the Commission, that "to make an allowance of amortization in excess of cost * * * would not be the computation of a proper expense but instead the allowance of additional profit over and above a fair return. Manifestly such an additional return would unjustly penalize consumers" (315 U. S. at 593).

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The majority below sought to distinguish the *Pipeline* case in this connection on the ground that Hope is not a "wasting-asset business of limited life," as was the utility considered in the *Pipeline* case, but is rather "an ordinary public utility which is required by law to continue its service to the public." (R. IV, 195). This purported distinction, besides being insubstantial, ignores the controlling principles recognized by this Court in the *Pipeline* case.

Although, unlike the *Pipeline* case, there is no stipulation in the instant case as to the time when Hope will be forced out of business for lack of reserves, it would be the first to concede that its present available natural gas reserves are not unlimited. The record establishes that the Company is contemplating an extension of its pipeline to new sources of supply, in order to meet its requirements (R. I, 47; R. III, 149). If Hope does not build such a pipeline extension, sooner or later, but inevitably, it must be forced out of business for lack of reserves. For it is common knowledge that as natural gas is consumed, reserves are depleted and the ultimate exhaustion of the supply is inevitable. This was equally true of the company involved in the *Pipeline* case, which expected to terminate business in 1954 for lack of reserves but will unquestionably be able to continue in business after 1954 if it obtains additional reserves. The company in the *Pipeline*

case was not a sport within the class of extractive industries; it was a "wasting asset business of limited life" solely because it was engaged in producing natural gas. All such companies are in the same position, and if an amortization allowance may be grounded upon cost for the natural gas company involved in the *Pipeline* case it is equally permissible for Hope. Certainly, the mere absence of an accord as to the precise year in which Hope's reserves will be exhausted, present in the *Pipeline* case, should not endow Hope with a constitutional right to have its depreciation allowance computed on a reproduction cost basis—a basis which will compel ratepayers to return more than the amount invested.

But the propriety of an annual depreciation allowance based on cost does not depend upon the nature of the utility's business. In *Lindheimer v. Illinois Bell Telephone Co.*, 292 U. S. 151, involving a telephone company, which is clearly not a "wasting asset business of limited life," this Court approved an annual depreciation allowance based on cost, pointing out that where the annual depreciation allowance is excessive, "to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered and thus to keep its investment unimpaired, but to secure additional plant and equipment upon which the utility expects a

return" (*supra* at 169).[48] See also *United States* v. *Ludey*, 274 U. S. 295, 300–302. Indeed, by recognizing cost as a permissible basis of computing the depreciation allowance, the *Lindheimer* case modifies the contrary holding in the earlier *West* case, 280 U. S. 234, on which the instant court below relied. See Mr. Justice Butler, concurring in *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 176; *Alexandria Water Company* v. *City Council of Alexandria*, 163 Va. 512. This is the view uniformly accepted by regulatory bodies, for despite the *West* case, the federal and state utility commissions, almost without exception, have continued to follow cost accounting for depreciation.[49]

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[48] Even if it is assumed that the purpose of annual depreciation allowances is to replace in the future the property which is currently being consumed, the fluctuation in price level would destroy any predictable relation between present value and future replacement cost. "To use as a measure of the year's consumption of plant a depreciation charge based on fluctuating present values substitutes conjecture for experience. Such a system would require the consumer of today to pay for an assumed operating expense which has never been incurred and which may never arise." *United Railways* v. *West*, 280 U. S. 234, 278 (Brandeis, J., dissenting). See also *Excess Income of St. Louis & O'Fallon Ry. Co.*, 124 I. C. C. 3, 29, 41. The price level at the time of replacement being unpredictable, present replacement cost is certainly no more reliable a basis for annual depreciation allowance than original cost. *United Railways* v. *West*, *supra*, at 290 (Stone, J., dissenting).

[49] *Depreciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 374; *Re Interstate Power Co.*, (F. P. C.) 32 P. U. R. (N. S.) 1; *Re Chicago District Electric Generating Corp.*, (F. P. C.) 39 P. U. R. (N. S.) 263;

Regardless of the nature of Hope's business, since the annual allowance provided by the Commission is based upon a reasonable determination of the life of Hope's existing investment and will reimburse Hope to the amount of that investment, the constitutional requirements are met. Hope's investment is continually being consumed in service and under the Commission's method the Company is reimbursed for the cost concurrently with the consumption. The funds supplied by the customers in the form of rates to cover annual depreciation and depletion are immediately available to Hope for investment in additions and replacements, enabling Hope to earn without delay an annual return and annual depreciation allow-

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*Re Canadian River Gas Co.*, (F. P. C.) 43 P. U. R. (N. S.) 205; *Detroit* v. *Panhandle Eastern Pipe Line Co.*, (F. P. C.) 45 P. U. R. (N. S.) 203; *Re Alabama Water Service Co.*, (Ala.) 32 P. U. R. (N. S.) 129, 130; *Re Patrons of Lakeville Water Co.*, (Conn.) P. U. R. 1932D, 138, 143; *Re Peoples Gas Light & Coke Co.*, (Ill.) 19 P. U. R. (N. S.) 177, 257; *Re Lincoln Tel. & Tel Co.*, (Neb.) 6 P. U. R. (N. S.) 81, 90; *Re Central Light & Power Co.*, (N. D.) 37 P. U. R. (N. S.) 106, 112; *Re North Dakota Power & Light Co.* (N. D.) 31 P. U. R. (N. S.) 26, 29; *Re Northern Power & Light Co.* (N. D.) 30 P. U. R. (N. S.) 1, 5; *Re Northern States Power Co.* (N. D.) 22 P. U. R. (N. S.) 364, 370; *Re Otter Tail Power Co.* (N. D.) 33 P. U. R. (N. S.) 301, 307; *Re Long Branch Sewer Co.* (N. J.) P. U. R. 1931A, 467, 473; *Re Yonkers Railroad Co.* (N. Y.) P. U. R. 1933B, 61, 84; *Re Yonkers Railroad Co.* (N. Y.) 9 P. U. R. (N. S.) 337, 365; *Re Swan Creek Electric Co.* (Utah) 35 P. U. R. (N. S.) 315, 316; *Re Mondovi Tel. Co.* (Wis.) P. U. R. 1933B, 319, 330; *Re Mondovi Tel. Co.* (Wis.) P. U. R. 1933D, 142; *Re Wisconsin Tel. Co.* (Wis.) 13 P. U. R. (N. S.) 224, 251.

ance upon that new property. The utility is therefore made whole and the integrity of its investment maintained.[30] Obviously, the Company ceases to have a right to a return upon the portion of the investment which has been consumed, and which is recouped from the rate payers through revenues covering annual depreciation allowances. See *Depreciation Charges of Telephone and Steam Railroad Companies*, 118 I. C. C. 295, 355; 177 I. C. C. 351, 410; Barnes, *The Economics of Public Utility Regulation* (1942), 261.

Accepted practice sanctions the Commission's choice of original cost as a basis for computing the depreciation allowance. To base the depreciation charge on cost is "the rule sanctioned by the universal practice of businessmen and governmental departments." (See Brandeis, J., dissenting in *United Railways* v. *West*, 280 U. S. 234, 275, citing an impressive array of authority drawn from all relevant data.) The practice of basing the depreciation charge on cost has been adopted and is being followed not only by non-

[30] No injustice to the Company would result from the fact that when property is retired, the cost of the replacing property may exceed the original cost of the retired property. For the new capital invested would be included in the rate base, and the Company entitled to a return thereon. Moreover, under the cost basis of depreciation, the depreciation allowance for the replacing property would be computed on its cost, and not on the cost of the retired property. Cf. *United Railways* v. *West*, 280 U. S. 234, 279 (Brandeis, J., dissenting).

utility enterprises,[51] but also in all the systems of accounts established by governmental rate-making agencies, federal and state.[52] The use of original cost in determining the depreciation charge is justified, as Mr. Justice Brandeis has demonstrated, by every relevant consideration of prudent business and accounting practice.

The universal business practice of basing depreciation on cost has significance for reasons other than the weight to be accorded to commercial custom. We are dealing here with the constitutional guarantee of due process; in its application to the present case, that guarantee, as we show above in discussing the underlying principle of *Smyth* v.

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[51] Gilman, *Accounting Concepts of Profit*, 348–349, 493; Sanders, Hatfield, and Moore, *A Statement of Accounting Principles* (1938), 31–32, 58–59, 60–65; Saliers, *Depreciation Principles and Applications*, 63, 68–69, 110; Montgomery, *Auditing Theory and Practice* (6th ed. 1940), 480; Paton and Littleton, *An Introduction to Corporate Accounting Standards*, 66, 89; see also Peloubet, *Special Problems in Accounting for Capital Assets*, 61 Journal of Accountancy 185; May, *The Influence of Accounting on the Development of an Economy*, 61 Journal of Accountancy 15–16; Bell and Jones, *Auditing* (1941), 245. Economists and accountants have likewise insisted that cost is the only proper basis of utility depreciation accounting. Mosher and Crawford, *Public Utility Regulation* (1933), 160–162; Jones and Bigham, *Principles of Public Utilities* (1937 ed.), 491 et seq.; Wilson, Herring and Eutsler, *Public Utility Regulation* (1938), 196 et seq.; see also Haun, *Inconsistencies in Public Utility Depreciation*, 38 Mich. L. Rev. 160, 479.

[52] The systems of account referred to in n. 40, p. 91, *supra*, all adopt cost as the basis of depreciation.

*Ames*, means simply that there will be no arbitrary governmental interference with property rights. To limit a utility to a depreciation charge which is the same as that universally made by all business men, even though they are completely free of regulation, cannot in any realistic sense be characterized as arbitrary governmental action. To the contrary, the Commission would be guilty of arbitrary conduct if it blinded itself to the practical experience of business men and thereby saddled upon consumers a charge having no basis in business realities.[53]

In the light of these considerations, we submit that even under the rule of *Smyth* v. *Ames*, rates which provide for a full return of the original investment satisfy all constitutional requirements in this respect.

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[53] The court below held that the Commission should have made an annual allowance for depreciation and depletion on capital added to the rate base after 1940 (R. IV, 196). But the Commission was under no legal obligation to make any allowance whatever for future capital additions. *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 592. Hence in allowing almost $1,400,000 for net future capital additions for the years 1941–43 (R. I, 50), the Commission was conferring a benefit to which Hope was not entitled as a matter of law. It can hardly demand the additional boon of a depreciation allowance on this gratuity. Moreover, the amount properly to be allowed for depreciation will depend on future operations, which cannot easily be forecast.

## VI

### HOPE WAS NOT HARMED BY THE EXCLUSION FROM 1940 OPERATING EXPENSES OF $165,963 FOR AN EXPERIMENTAL DEEP-TEST WELL

In accordance with the conservative practice of natural-gas companies, Hope had followed the practice of charging all exploration and development costs to operating expenses. The Commission approved of this practice and found that Hope's exploration and development costs for 1940 were $407,920, but excluded from such costs the sum of $165,963 for an experimental deep-test well which was completed dry in 1941 and charged by Hope on its books as an operating expense for 1941. The court below upheld Hope's contention that this sum should have been included in 1940 operating expenses. However, the court observed that "the matter can have little bearing in future hearings, as the test period will doubtless cover 1941 as well as 1940 and it will be immaterial which year carries the charge" (R. IV, 198).

Without discussing the propriety of excluding these costs from operating expenses for 1940, it is clear that Hope has not been harmed. The Commission delved into the details of Hope's transactions for 1940 solely to provide a basis for estimating its future expenses. Although the Commission found Hope's exploration and development costs to be $407,920 for 1940, it allowed $600,000 as the proper and reasonable annual

future allowance for exploration and development expenses, which represented a substantial increase in the expenses experienced by the Company in 1940. Since the amount found by the Commission ($407,920) plus the additional amount claimed by Hope ($165,963) is roughly $25,000 less than the $600,000 allowed by the Commission as the annual future allowance for such purposes, Hope cannot validly claim to have been harmed by this exclusion from its exploration and development costs for 1940.

## VII

### THE COMMISSION'S FINDINGS AS TO THE LAWFULNESS OF PAST RATES WERE PROPER AND, IF REVIEWABLE, SHOULD BE UPHELD

As early as July 1938 the Cities of Cleveland and Akron had filed complaints with the Commission, charging that the rates collected by Hope from the East Ohio Gas Company were excessive and unreasonable (R. II, 1, 7). Cleveland prayed specially for a determination by the Commission that Hope's collected rates from East Ohio were unreasonable and therefore unlawful, and for a determination of the just and reasonable rates from June 30, 1939, to the date of the Commission's decision. Such determinations were requested "in the aid of State regulation" and to afford the Public Utilities Commission of Ohio a proper basis for disposition of a fund collected by East Ohio under bond from

Cleveland consumers since June 30, 1939 (R. II, 14).[34]

The Commission, when it entered its order on May 26, 1942, reducing the rates to be charged by Hope after July 1, 1942, also made "Findings As To The Lawfulness Of Past Rates" (R. I, 8–13). It found that the rates charged by Hope during the period from June 30, 1939, to the effective date of the order were unjust and unreasonable and therefore "unlawful," and that the charges to East Ohio were excessive in the amount of $830,892 in 1939, $3,219,551 during 1940 and $2,815,789 on an annual basis since 1940 (R. I, 12–13). These findings were made as "an aid to state regulation" pursuant to the complaints of the Cities of Cleveland and Akron (R. I, 67–69; R. II, 1–2, 7–8, 14–15).

The court below set aside the Commission's findings as to past rates, holding that rates filed with the Commission pursuant to Section 4 (c) of the Act "become the only lawful rates which the utility could charge or accept" until changed by a Commission order prescribing rates for the future, and that the Commission could make findings with respect to past rates only as a step in the process of fixing rates for the future, and not "as an aid

[34] This fund represents the difference between East Ohio's previous rates and the lower rates established by ordinance of the City of Cleveland, which East Ohio is collecting pending its appeal from the ordinance to the Public Utilities Commission of Ohio.

to state regulation" (R. IV, 199–203). The court also held that if viewed as an incident of the Commission's power to fix future rates, the findings as to past rates were invalid for the same reasons as the future rate order and for the further reason that the Commission based these findings on experience for the years in question rather than on estimates taken from the experience of a prior period (R. IV, 200, 202).

We submit that this action was error since the findings were within the statutory power of the Commission and were proper for the reasons advanced above to sustain the order prescribing future rates. While we have serious doubts as to whether the findings as to past rates present a matter for judicial review, we believe that if they are reviewable, their propriety should be sustained in this Court.

A. THE COMMISSION'S "FINDINGS AS TO THE LAWFULNESS OF PAST RATES" MAY NOT BE REVIEWABLE HERE

Section 19 (b) of the Natural Gas Act vests in the courts of appeals jurisdiction to review any "order" of the Commission upon the petition of a party "aggrieved" by the order. In the exercise of this jurisdiction, courts reviewing a rate order of the Commission would necessarily have the right to review all findings made by the Commission in connection therewith, including findings as to the reasonableness of past rates made in the course of issuing such rate order.

However, it is doubtful whether there may be judicial review of findings as to past rates, when made independently of a rate order, for example as an aid to state regulation, which was here the case. The fact that these findings are not designated as an order is of course immaterial to the question of reviewability for "it is the substance of what the Commission has purported to do and has done which is decisive. *Powell* v. *United States,* 300 U. S. 276, 284–285; *A. F. of L.* v. *Labor Board,* 308 U. S. 401, 408." *Columbia Broadcasting System* v. *United States,* 316 U. S. 407, 416.

But considering the substance and the legal effect of the findings, we entertain substantial doubts whether the findings standing alone have the legal impact upon Hope which this Court has hitherto deemed necessary for judicial review. The findings declare that rates charged by Hope since June 30, 1939, are unlawful, but they do not require or inhibit any action by Hope as a result thereof. It is not contended that the Commission has threatened to impose any legal sanctions as a result of the findings, or has attempted to enforce them in any way, or that as a result of these findings any of Hope's customers have refused to deal with the Company (cf. *Columbia Broadcasting System* v. *United States, supra*), and there is no evidence of any other substantial adverse effect therefrom.

It is true that the findings in question were made "as an aid to state regulation," and may furnish the basis for an order by a state regulatory body or court for repayment of excessive rates. At present, however, these findings are merely a preliminary to possible future action in proceedings brought before totally independent governmental bodies, proceedings whose outcome may hinge upon many factors unrelated to the Commission's findings and whose result might conceivably leave Hope unharmed. For these reasons, we incline to the view that the findings do not have such effect upon Hope's legal rights nor such legal or substantial impact upon Hope's interests to make them reviewable under the principles enunciated by this Court. *Rochester Tel. Corp.* v. *United States*, 307 U. S. 125, 130; *United States* v. *Los Angeles & S. L. R. Co.*, 273 U. S. 299, 309, 310.

We do not mean to imply that the state commission is at liberty to ignore the findings. They are plainly admissible in the state proceedings (see *United States* v. *Los Angeles & S. L. R.*, 273 U. S. 299, 312), and their effect is strengthened by the fact of affiliation between respondent and the local distributing companies. Cf. *Houston* v. *Southwestern Tel. Co.*, 259 U. S. 318, 323. We recognize, moreover, the practical advantage of permitting judicial review in proceedings to which the Federal Power Commission is a party. The Commission has no desire to avoid review, and

for that reason did not press below the non-reviewability of the findings. But since the question goes to the statutory authority of the court below, we feel obliged to raise the issue.

B. THE COMMISSION HAS AUTHORITY TO MAKE FINDINGS AS TO LAWFULNESS OF PAST RATES "AS AN AID TO STATE REGULATION"

The authority granted to the Commission in the Natural Gas Act to fix rates "to be thereafter observed and in force" (Sec. 5 (a)) admittedly does not include authority to *fix* past rates. But there is clearly power under the Act to determine and make findings as to the *lawfulness* of past rates. Section 14 (a) empowers the Commission to investigate any matter in order to determine whether any person *has* violated any provision of the Act, and Section 4 (a) explicitly forbids and declares unlawful the charging of unjust and unreasonable rates. Since the charging of such rates is an unlawful act and in violation of Section 4 (a), an investigation of the lawfulness of Hope's past rates is clearly within the ambit of the investigatory power granted the Commission by Section 14 (a).[55] Moreover, the Commission may, upon its own motion or at the request of a state commission, investigate and determine the

[55] The Interstate Commerce Commission has made similar determinations under an analogous provision of the Motor Carrier Act of 1935 (Secs. 216, 217). See *W. A. Barrows Porcelain Enamel Co.* v. *Cushman Motor Delivery Co.*, 11 M. C. C. 365, 366; *Dixie Mercerizing Co.* v. *ET & WNC Motor Transportation Co.*, 21 M. C. C. 491, 492.

cost of production or transportation of natural gas in cases where it may not establish rates (Section 5 (b)), and is required by Section 17 (c) to "make available to the several State commissions such information and reports as may be of assistance in State regulation of natural gas companies." The findings as to past rates fall within the contemplation of these provisions, constituting not only determinations as to cost but also "information and reports" as to lawful and reasonable rates for the period in question, as an aid to State regulation.

The court below discerned jurisdictional objections to the findings because rates filed by companies with the Commission pursuant to Section 4 (c) of the Act become the "lawful" rates until changed by Commission order, and such rates, it thought, may not be found to be "unlawful" (R. IV, 200, 202). The court's error, we suggest, consists in overlooking the clearly established distinction between "legal" and "lawful" rates. Companies subject to the Act must "file with the Commission" and "keep open * * * for public inspection, schedules showing all rates and charges for any transportation or sale subject to the jurisdiction of the Commission" (Section 4 (c)). These are the "legal" rates which must be charged to all consumers. Cf. *Arizona Grocery Co.* v. *Atchison, Topeka & Santa Fe Ry. Co.*, 284

U. S. 370, 384; *Louisville & N. R. Co.* v. *Maxwell*, 237 U. S. 94. But in addition to the requirement as to filing of rates, the Act imposes a duty on all companies subject to the jurisdiction of the Commission to charge only "just and reasonable" rates, and declares unlawful "any such rate or charge that is not just and reasonable" (Section 11 (a)). The distinction is plain: the filed rates are the "legal" rates, but only just and reasonable rates are the "lawful" rates. "In other words, the legal rate was not made by the statute a lawful rate—it was lawful only if it was reasonable." *Arizona Grocery Co.* v. *Atchison, Topeka & Santa Fe Ry. Co.*, 284 U. S. 370, 384; see *Re Home Gas Co.*, 39 P. U. R. (N. S.) 102, 109.

The holding below, that rates filed under Section 4 (c) become the only "lawful" ones, would deprive Section 4 (a) of all meaning. For if rates once filed become "lawful" under Section 4 (a), no matter how unjust or unreasonable they may be, and if the Commission is powerless to consider and determine whether they meet the standards of justness and reasonableness imposed by Section 4 (a), the statutory declaration of their "unlawfulness" becomes an empty phrase, and the rate payers may be left without a forum in which to challenge the lawfulness of interstate wholesale gas rates prevailing between the date of the Act's

passage and the effective date of a Commission rate-fixing order.

Even in the absence of the Natural Gas Act state regulatory commissions would appear to be without power to regulate interstate wholesale rates for natural gas. *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, 317 U. S. 456, 468; *Illinois Natural Gas Co.* v. *Central Illinois Public Service Co.*, 314 U. S. 498, 506; *Missouri* v. *Kansas Natural Gas Co.*, 265 U. S. 298; *Public Utilities Commission* v. *Attleboro Steam & Electric Co.*, 273 U. S. 83. It is clear, at all events that after the effective date of the Act, the state regulatory commissions do not have power to determine the lawfulness of Hope's interstate wholesale rates since "Congress by that Act * * * preempted the regulatory power over transportation and sale of natural gas in interstate commerce". *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co., supra* at 466; cf. *Illinois Natural Gas Co.* v. *Central Illinois Public Service Co., supra.* While a state commission may call for data in Hope's possession to aid in determining the lawfulness of a distributor's local rates (*Public Utilities Comm. of Ohio* v. *United Fuel Gas Co., supra,* at 468, 470), this power falls short of a full-scale investigation necessary to determine the reasonableness of Hope's interstate rates.

The courts, whether state or federal, are also without power to determine the lawfulness of

interstate wholesale rates for natural gas, and, in order to maintain a uniform standard of rates, must refer proceedings involving the reasonableness of such rates to the regulatory commission concerned, for primary consideration. Cf. *Texas & Pacific Ry. Co. v. Abilene Cotton Oil Co.*, 204 U. S. 426; *Board of R. R. Comm'rs* v. *Great Northern Ry. Co.*, 281 U. S. 412, 422; *U. S. Navigation Co.* v. *Cunard S. S. Co.*, 284 U. S. 474. The determination of a question such as whether past rates were "just and reasonable" and hence "lawful" involves intricate and technical matters of fact requiring "comprehensive study of an expert body continuously engaged in administrative supervision." *Board of R. R. Comm'rs* v. *Great Northern Ry. Co.*, *supra*, at 422; *Great Northern Ry. Co.* v. *Merchants Elevator Co.*, 259 U. S. 285, 291. Jurisdiction in the courts or in a state regulatory body over these issues would pave the way for inconsistent adjudications by a variety of tribunals—the very "confusion of functions" which the Act was designed to avoid (*Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, *supra*, at 467), and which this Court long ago condemned in the *Abilene* case, *supra*, at 440.

On the other hand, recognition of the Commission's jurisdiction to determine the lawfulness of interstate wholesale rates charged since the effective date of the Act will effectuate the Congres-

sional objective of "a harmonious, dual system of regulation of the natural gas industry—federal and state regulatory bodies operating side by side, each active in its own sphere. See H. Rep. No. 2651, 74th Cong., 2d Sess., pp. 1–3; H. Rep. No. 709, 75th Cong., 1st Sess., pp. 1–4; Sen. Rep. No. 1162, 75th Cong., 1st Sess." *Public Utilities Comm. of Ohio* v. *United Fuel Gas Co.*, *supra*, at 467.

The lower court's rationale that because the Commisison lacks authority to award reparations it may not inquire into the lawfulness of past rates (R. IV, 200–202) conflicts sharply with the decisions of this Court. Thus, the lack of power in the Interstate Commerce Commission to grant reparations for intrastate rates charged and collected which discriminated unduly against interstate commerce does not deprive it of power "to inquire whether injustice had been done and to make report accordingly" to the District Court where a shipper's suit for restitution was pending. *Atlantic Coast Line Co.* v. *Florida*, 295 U. S. 301, at 312. And in *United States* v. *Morgan*, 307 U. S. 183, proceedings for the distribution of the fund collected under an invalid order of the Secretary of Agriculture were restrained pending a determination by the Secretary of the just and reasonable rates during the period covered by the fund. This Court pointed out that the lack of authority in the

Secretary to award reparation in that proceeding did not affect his power to investigate and decide the reasonableness of past rates. *United States* v. *Morgan, supra,* at 192.

While we believe the conclusion would be the same if the findings in question were made by the Commission on its own motion, they take on additional significance from the fact that the Cities of Cleveland and Akron had expressly requested an investigation as to the lawfulness of these past rates, to afford the Public Utilities Commission of Ohio a basis for determining reasonable rates charged by East Ohio to its intrastate customers. Cf. *United States* v. *Morgan, supra,* at 193.

For these reasons, we submit that the findings as to past rates were well within the Commission's statutory powers.

C. THE COMMISSION'S FINDINGS THAT PAST RATES WERE UNREASONABLE ARE SUPPORTED BY SUBSTANTIAL EVIDENCE AND ARE OTHERWISE PROPER

No extended argument is warranted to demonstate the propriety of the findings on past rates, considered as a rate-making determination. The Commission adopted the same principles for its "Findings as to Lawfulness of Past Rates" as it did in fixing rates for the future, and the constitutional and statutory validity of those principles has already been discussed. To the extent that the court below condemned the findings for the

reasons which led it to overturn the Commission's order prescribing rates, we suggest that the court's action was erroneous for the reasons already stated.

The court below, however, also advanced the objection that the Commission, in formulating its findings as to past rates, had used actual experience as to Hope's expenses rather than reasonable estimates of expenses based on prior experience (R. IV, 200, 202). We believe that this ruling was erroneous.

In making its findings as to past rates, the Commission employed Hope's actual experience as to expenses and sales for 1939 and for each of the subsequent years. While a forecast may be requisite when the reasonable operation of future rates is in question, it is impossible to conceive of a sounder test for determining whether rates were more reasonable and lawful in the past than the actual operating experience of the Company during the years in question. Indeed, as this Court has held, it would have been arbitrary for the Commission to prefer prophecy to a survey when the actual facts were available. *West Ohio Gas Co.* v. *Public Utilities Commission*, 294 U. S. 63, 79, 82. The lower court's observation that it is "impractical to conduct a wholesale natural-gas business on the basis of annual changes in rates" (R. IV, 203) overlooks the fact that many whole-

sale contracts for utility service provide for the annual adjustment of rates. As a rule, a utility has only a few wholesale customers, and when the major customers, like Hope's, are its affiliates the periodic change in rates is facilitated. Following the practice of the utilities in each case, provision has been made by regulatory bodies for periodic changes in wholesale rates. *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263, 281; *Re Safe Harbor Water Power Corp.*, 34 P. U. R. (N. S.) 236, 247.

In finding the lawful rates for 1939, 1940, 1941, and up to the date of the Commission's order fixing rates for the future, the Commission determined the investment base for each period, and allowed a 6½% rate of return thereon, in addition to all operating expenses plus the amount of tax required under lawful rates (R. I, 11–13). It was only the excess over this liberal allowance which the Commission found to be the result of excessive and unreasonable charges, a method which can hardly be deemed unreasonable or arbitrary.

There is substantial evidence to support each basic and ultimate finding made by the Commission as to the lawfulness of past rates (R. I, 225–341, 373–390; R. III, 25–81, 173–201, 224–365, 373–394, 397–489), and we submit that the findings are entitled to the finality provided for by Section 19 (b) of the Act.

## CONCLUSION

For the foregoing reasons, it is respectfully submitted that the judgment below should be reversed.

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SEPTEMBER 1943.

## APPENDIX A

The pertinent provisions of the Natural Gas Act of 1938, c. 556, 52 Stat. 821 (15 U. S. C. § 717) are as follows:

SECTION 1. (a) As disclosed in reports of the Federal Trade Commission made pursuant to S. Res. 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is hereby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

(b) The provisions of this Act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

SEC. 2. When used in this Act, unless the context otherwise requires—

(1) "Person" includes an individual or a corporation.

(2) "Corporation" includes any corporation, joint-stock company, partnership, association, business trust, organized group of

persons, whether incorporated or not, receiver or receivers, trustee or trustees of any of the foregoing, but shall not include municipalities as hereinafter defined.

(3) "Municipality" means a city, county, or other political subdivision or agency of a State.

(4) "State" means a State admitted to the Union, the District of Columbia, and any organized Territory of the United States.

(5) "Natural gas" means either natural gas unmixed, or any mixture of natural and artificial gas.

(6) "Natural-gas company" means a person engaged in the transportation of natural gas in interstate commerce, or the sale in interstate commerce of such gas for resale.

(7) "Interstate commerce" means commerce between any point in a State and any point outside thereof, or between points within the same State but through any place outside thereof, but only insofar as such commerce takes place within the United States.

(8) "State commission" means the regulatory body of the State or municipality having jurisdiction to regulate rates and charges for the sale of natural gas to consumers within the State or municipality.

(9) "Commission" and "Commissioner" means the Federal Power Commission, and a member thereof, respectively.

* * * * *

RATES AND CHARGES; SCHEDULES; SUSPENSION OF NEW RATES

SEC. 4. (a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the

transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.

(b) No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.

(c) Under such rules and regulations as the Commission may prescribe, every natural-gas company shall file with the Commission, within such time (not less than sixty days from the date this Act takes effect) and in such form as the Commission may designate, and shall keep open in convenient form and place for public inspection, schedules showing all rates and charges for any transportation or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.

* * * * *

FIXING RATES AND CHARGES; DETERMINATION OF COST OF PRODUCTION OR TRANSPORTATION

SEC. 5. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality,

State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

(b) The Commission upon its own motion, or upon the request of any State commission, whenever it can do so without prejudice to the efficient and proper conduct of its affairs, may investigate and determine the cost of the production or transportation of natural gas by a natural-gas company in cases where the Commission has no authority to establish a rate governing the transportation or sale of such natural gas.

ASCERTAINMENT OF COST OF PROPERTY

SEC. 6. (a) The Commission may investigate and ascertain the actual legitimate cost

of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction.

* * * * *

ACCOUNTS, RECORDS, AND MEMORANDA

SEC. 8. (a) Every natural-gas company shall make, keep, and preserve for such periods, such accounts, records of cost-accounting procedures, correspondence, memoranda, papers, books, and other records as the Commission may by rules and regulations prescribe as necessary or appropriate for purposes of the administration of this Act: *Provided, however,* That nothing in this Act shall relieve any such natural gas company from keeping any accounts, memoranda, or records which such natural-gas company may be required to keep by or under authority of the laws of any State. The Commission may prescribe a system of accounts to be kept by such natural-gas companies, and may classify such natural-gas companies and prescribe a system of accounts for each class. The Commission, after notice and opportunity for hearing, may determine by order the accounts in which particular outlays or receipts shall be entered, charged, or credited. The burden of proof to justify every accounting entry

questioned by the Commission shall be on the person making, authorizing, or requiring such entry, and the Commission may suspend a charge or credit pending submission of satisfactory proof in support thereof.

* * * * *

RATES OF DEPRECIATION

SEC. 9. (a) The Commission may, after hearing, require natural-gas companies to carry proper and adequate depreciation and amortization accounts in accordance with such rules, regulations, and forms of account as the Commission may prescribe. The Commission may from time to time ascertain and determine, and by order fix, the proper and adequate rates of depreciation and amortization of the several classes of property of each natural-gas company used or useful in the production, transportation, or sale of natural gas. Each natural-gas company shall conform its depreciation and amortization accounts to the rates so ascertained, determined, and fixed. No natural-gas company subject to the jurisdiction of the Commission shall charge to operating expenses any depreciation or amortization charges on classes of property other than those prescribed by the Commission, or charge with respect to any class of property a percentage of depreciation or amortization other than that prescribed therefor by the Commission. No such natural-gas company shall in any case include in any form under its operating or other expenses any depreciation, amortization, or other charge or expenditure included elsewhere as a depreciation or amortization charge or otherwise under its operating or

other expenses. Nothing in this section shall limit the power of a State commission to determine in the exercise of its jurisdiction, with respect to any natural-gas company, the percentage rates of depreciation or amortization to be allowed, as to any class of property of such natural-gas company, or the composite depreciation or amortization rate, for the purpose of determining rates or charges.

* * * * *

COMPLAINTS

SEC. 13. Any State, municipality, or State commission complaining of anything done or omitted to be done by any natural-gas company in contravention of the provisions of this Act may apply to the Commission by petition, which shall briefly state the facts, whereupon a statement of the complaint thus made shall be forwarded by the Commission to such natural-gas company, which shall be called upon to satisfy the complaint or to answer the same in writing within a reasonable time to be specified by the Commission.

INVESTIGATIONS BY COMMISSION; ATTENDANCE OF WITNESSES; DEPOSITIONS

SEC. 14. (a) The Commission may investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person has violated or is about to violate any provision of this Act or any rule, regulation, or order thereunder, or to aid in the enforcement of the provisions of this Act or in prescribing rules or regulations thereunder, or in obtaining information to serve as a basis for

recommending further legislation to the Congress. The Commission may permit any person to file with it a statement in writing, under oath or otherwise, as it shall determine, as to any or all facts and circumstances concerning a matter which may be the subject of investigation. The Commission, in its discretion, may publish in the manner authorized by section 312 of the Federal Power Act, and make available to State commissions and municipalities, information concerning any such matter.

* * * * *

ADMINISTRATIVE POWERS OF COMMISSION; RULES, REGULATIONS, AND ORDERS

SEC. 16. The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this Act. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this Act; and may prescribe the form or forms of all statements, declarations, applications, and reports to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify persons and matters within its jurisdiction and prescribe different require-

ments for different classes of persons or matters. All rules and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours.

USE OF JOINT BOARDS; COOPERATION WITH STATE COMMISSIONS

SEC. 17. (a) The Commission may refer any matter arising in the administration of this Act to a board to be composed of a member or members, as determined by the Commission, from the State or each of the States affected or to be affected by such matter. Any such board shall be vested with the same power and be subject to the same duties and liabilities as in the case of a member of the Commission when designated by the Commission to hold any hearings. The action of such board shall have such force and effect and its proceedings shall be conducted in such manner as the Commission shall by regulations prescribe. The Board shall be appointed by the Commission from persons nominated by the State commission of each State affected, or by the Governor of such State if there is no State commission. Each State affected shall be entitled to the same number of representatives on the board unless the nominating power of such State waives such right. The Commission shall have discretion to reject the nominee from any State, but shall thereupon invite a new nomination from that State. The members of a board shall receive such allowances for expenses as the Commission shall provide. The Commission may, when in its discretion sufficient

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reason exists therefor, revoke any reference to such a board.

(b) The Commission may confer with any State commission regarding rate structures, costs, accounts, charges, practices, classifications, and regulations of natural-gas companies; and the Commission is authorized, under such rules and regulations as it shall prescribe, to hold joint hearings with any State commission in connection with any matter with respect to which the Commission is authorized to act. The Commission is authorized in the administration of this Act to avail itself of such cooperation, services, records, and facilities as may be afforded by any State commission.

(c) The Commission shall make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies. Whenever the Commission can do so without prejudice to the efficient and proper conduct of its affairs, it may, upon request from a State commission, make available to such State commission as witnesses any of its trained rate, valuation, or other experts, subject to reimbursement of the compensation and traveling expenses of such witnesses. * * *

* * * * * *

REHEARINGS; COURT REVIEW OF ORDERS

SEC. 19. (b) Any party to a proceeding under this Act aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located

or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by sub-

stantial evidence, shall be conclusive, and its recommendation, if any, for the modification or seting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 346 and 347).

# APPENDIX B

## HOPE NATURAL GAS COMPANY

## COMPARATIVE STATEMENTS, 1939–1942

TABLE 1.—*Hope Natural Gas Company, comparative statement of revenues and expenses, per books, years ended December 31, 1939–1942, inclusive*

| (1) | Gas revenue at old rates | | | | 1942 revenue at new rates for full year |
|---|---|---|---|---|---|
| | 1939 (2) | 1940 (Commission test period) (3) | 1941 (4) | 1942 [2] (5) | (6) |
| REVENUES | | | | | |
| *Interstate sales* | | | | | |
| The East Ohio Gas Co | $12,356,560 | $14,729,739 | $16,078,934 | $18,570,960 | $15,009,398 |
| The Peoples Nat. Gas Co. [1] | 1,371,757 | 3,457,207 | 5,722,362 | 5,634,367 | 4,523,365 |
| Fayette County Gas Co | 264,726 | 270,618 | 284,748 | 260,718 | 235,888 |
| The River Gas Co | 83,174 | 136,063 | 119,595 | 133,036 | 133,036 |
| Manufacturers Lt. & Ht. Co | 787,738 | 706,130 | 629,701 | 630,712 | 570,644 |
| Total Interstate | 14,866,894 | 19,299,755 | 22,835,340 | 25,229,783 | 20,472,331 |
| Other revenues | 3,472,972 | 5,099,663 | 5,296,788 | 3,988,036 | |
| Total revenues—per books | 18,339,866 | 24,399,418 | 28,132,128 | 29,217,819 | |
| OPERATING EXPENSE | | | | | |
| Production expenses | 1,439,971 | 1,951,802 | 1,700,109 | 2,322,256 | |
| Gas purchased | 7,740,854 | 8,629,481 | 10,432,993 | 10,696,307 | |
| Transmission expenses | 1,791,070 | 2,303,831 | 2,730,636 | 2,869,637 | |
| Distribution expenses | 201,926 | 218,760 | 240,684 | 269,309 | |
| Cust. acctg. & coll. expenses | 160,288 | 160,265 | 160,768 | 179,154 | |
| Sales promotion | 5,982 | 6,089 | 1,617 | 30 | |
| Administrative & general | 1,595,814 | 1,727,314 | 1,858,625 | 1,576,012 | |
| Taxes (except Fed. income) | 1,211,732 | 1,464,514 | 1,540,105 | 1,509,639 | |
| Subtotal | 14,151,549 | 16,162,116 | 18,755,528 | 19,392,404 | |
| Depreciation & depletion | 1,224,769 | 1,469,582 | 1,551,001 | 1,455,009 | |
| Exploration and dev. costs | 455,179 | 427,233 | 761,568 | 552,704 | |
| Total except Fed. income tax | 15,831,497 | 18,058,931 | 21,068,097 | 21,400,117 | |
| Net operating income (before Fed. income tax) | 2,508,369 | 6,337,487 | 7,064,031 | 7,817,702 | |
| Federal income tax | 225,000 | 1,000,000 | 1,750,000 | 2,020,000 | |
| Net operating income | 2,283,369 | 5,337,487 | 5,314,031 | 5,797,702 | |
| Source | R. III, p. 293 | R. III p. 295 | Annual report, p. 301 | Annual report, p. 301 | |

[1] Reduced by refund of 3¢ per MCF $115,925 $292,158 $483,380

[2] Includes $1,952,906 of revenues not received due to rate reduction effective July 15, 1942. See computation on following schedule

TABLE 1-A.—*Hope Natural Gas Company, statement of M. c. f. of gas sold during 1942 showing (a) actual revenues for 1942 (6½ months at old rates and 5½ months at new rates), (b) revenues for 1942 computed at old rates for full year, (c) revenues for 1942 computed at new rates for full year*

| (1) | M. C. F. | Revenue 1942 [1] | 1942 revenue computed at— | | 1942 revenue computed at— | | Reduction in revenues based on full year 1942 |
|---|---|---|---|---|---|---|---|
| | | | Average rate before F. P. C. order | Amount | Average rate after F. P. C. order | Amount | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| INTERSTATE SALES | | | | | | | |
| | | | *Cents* | | *Cents* | | |
| The East Ohio Gas Company | 50,879,314 | $17,143,714 | 35.5 | $18,570,950 | 29.5 | $15,009,398 | $3,561,552 |
| The Peoples Natural Gas Company | 15,871,455 | 5,143,108 | 35.5 | 5,634,367 | 28.5 | 4,523,365 | 1,111,002 |
| Fayette County Gas Company | 827,678 | 250,666 | 31.5 | 260,718 | 28.5 | 235,888 | 24,830 |
| The River Gas Company | 380,103 | 133,036 | 35.0 | 133,036 | 35.0 | 133,036 | |
| Manufacturers Light & Heat Company | 2,002,261 | 606,653 | 31.5 | 630,712 | 28.5 | 570,644 | 60,068 |
| | 69,960,811 | 23,277,177 | | 25,229,783 | | 20,472,331 | 4,757,452 |
| INTRASTATE SALES | | | | | | | |
| Residential | 4,618,887 | 1,726,740 | No change | | No change | | |
| Commercial | 708,477 | 265,350 | | | | | |
| Industrial | 6,341,049 | 1,584,144 | | | | | |
| Pub. St. and Highway Ltg. | 470 | 173 | | | | | |
| Other sales to public authorities | 676 | 255 | | | | | |
| Other sales | 445,894 | 124,419 | | | | | |
| Intrastate sales to other gas utilities | 231,091 | 37,980 | | | | | |
| Total | 12,346,544 | 3,739,031 | | 3,739,031 | | 3,739,031 | |
| Total gas service revenues | | | | | | | |
| Other gas revenues | | 249,004 | | 249,004 | | 249,004 | |
| Total operating revenues | 82,307,355 | 27,265,212 | | 29,217,818 | | 24,460,366 | |

[1] Reflects rate reductions as of April 15, 1942 ordered by F. P. C.

TABLE 2.—*Hope Natural Gas Company, comparative statement of M. C. F. of gas sales, per books, years ended December 31, 1939–1942, inclusive*

| | 1939 | 1940 | 1941 | 1942 |
|---|---|---|---|---|
| INTERSTATE SALES—M. C. F. | | | | |
| The East Ohio Gas Company | 33, 907, 672 | 40, 376, 091 | 44, 320, 966 | 50, 879, 314 |
| The Peoples Natural Gas Company | 3, 864, 104 | 9, 738, 612 | 16, 119, 330 | 15, 871, 455 |
| Fayette County Gas Company | 840, 398 | 859, 106 | 903, 962 | 827, 678 |
| The River Gas Company | 237, 646 | 388, 750 | 341, 699 | 380, 103 |
| Manufacturers Light & Heat Company | 2, 500, 755 | 2, 241, 684 | 1, 999, 052 | 2, 002, 261 |
| Total interstate sales—M. C. F. | 41, 350, 569 | 53, 604, 243 | 63, 685, 009 | 69, 960, 811 |
| Other sales—M. C. F. | 10, 011, 412 | 15, 451, 527 | 16, 251, 484 | 12, 346, 544 |
| Total sales—M. C. F. | 51, 361, 981 | 69, 055, 770 | 79, 936, 493 | 82, 307, 355 |
| Source | R. III, p. 257 | R. III, p. 307 | Annual report, p. 425 | Annual report, p. 425 |

TABLE 3.—*Hope Natural Gas Company, comparative statement of normal tax net income, per income tax returns*

| | 1939 | 1940 | 1941 | 1942 |
|---|---|---|---|---|
| Normal tax net income, per income tax return [1] | $1, 160, 733 | $3, 916, 999 | $5, 127, 652 | $4, 397, 436 |
| 6½ months' rate reduction reflected in 1942 income | | | | 1, 952, 606 |
| Comparative normal tax net income | 1, 160, 733 | 3, 916, 999 | 5, 127, 652 | 6, 350, 042 |

[1] Federal income tax returns have not been closed since 1933.

TABLE 4.—*Hope Natural Gas Company, comparative statement of gas plant and other assets—per books*

| | (R. III, p. 17) Dec. 31, 1939 | (R. III, p. 17) Dec. 31, 1940 | (Annual report, p. 200) Dec. 31, 1941 | (Annual report, p. 200) Dec. 31, 1942 |
|---|---|---|---|---|
| Total utility plant | $64, 250, 655 | $65, 193, 287 | $66, 698, 621 | $67, 392, 638 |
| Reserves for depl., depr., and amort | 46, 041, 155 | 46, 737, 713 | 47, 296, 193 | 48, 079, 707 |
| Net investment in plant | 18, 209, 500 | 18, 455, 574 | 19, 402, 428 | 19, 312, 931 |
| Net current assets (principally temporary cash investments) | 14, 678, 387 | 17, 377, 408 | 16, 780, 619 | 18, 865, 973 |
| Fund and miscellaneous accounts | 334, 903 | 295, 489 | 2, 504, 547 | 3, 568, 169 |
| Total net investment in assets, etc | 33, 222, 790 | 36, 128, 471 | 38, 687, 594 | 41, 687, 093 |
| Represented by: | | | | |
| Common stock | 27, 969, 300 | 27, 969, 300 | 27, 969, 300 | 27, 969, 300 |
| Surplus | 5, 253, 490 | 8, 159, 171 | 10, 718, 294 | 13, 717, 793 |
| Invested capital—per books | 33, 222, 790 | 36, 128, 471 | 38, 687, 594 | 41, 687, 093 |
| Invested capital—per tax returns, as adjusted | | 31, 658, 887 | 33, 821, 749 | 36, 562, 811 |

TABLE 5.—*Hope Natural Gas Company, indicated rate reduction based on findings of the Commission for the year 1939 and reported changes in plant, revenues, and expenses to December 31, 1942*

| | 1939 per commission findings | Increase per books | 1942 |
|---|---|---|---|
| Operating revenues from interstate sales | $14,866,894 | $10,362,889 | $25,229,783 |
| Operating deductions: | | | |
| Operating expenses, except Federal income tax | 11,805,933 | 5,053,556 | 16,859,489 |
| Federal income tax | 191,521 | 2,348,496 | [1] 2,540,017 |
| Total | 11,997,454 | 7,402,052 | 19,399,506 |
| Net operating revenues from interstate sales | 2,869,440 | 2,960,837 | 5,830,277 |
| Return at 6½% | 2,101,216 | 219,516 | [2] 2,320,732 |
| Excess earnings before income tax saving | 768,224 | 2,741,321 | 3,509,545 |
| Income tax saving | 151,805 | 2,187,892 | 2,339,697 |
| Total indicated rate reduction | 920,029 | 4,929,213 | 5,849,242 |

| | | | |
|---|---|---|---|
| [1] Normal tax net income, per book accruals, 1942 | | $4,397,436 | |
| Add, 5½ months rate reduction reflected in 1942 income | | 1,952,606 | |
| Total | | 6,350,042 | |
| Normal tax (24%) and surtax (16%) | | | $2,540,017 |
| [2] Rate base—1939 | $32,326,398 | | |
| Net increase, per books | 3,377,171 | | |
| Rate base—1942 | 35,703,569 | | |
| 6½% return | 2,320,732 | | |

*Net increase 1939–1942*

| | *Jan. 1, 1939* | *Increase* | *Dec. 31, 1942* |
|---|---|---|---|
| Total utility plant, per books | $56,649,799 | $10,742,859 | $67,392,658 |
| Reserves for depl., depr. and amort | 40,714,019 | 7,365,688 | 48,079,707 |
| Net investment per books | 15,935,780 | 3,377,171 | 19,312,951 |

NOTE.—Includes former Reserve Gas Company property.

# APPENDIX C

## Tabulation of State Statutes Concerning the Accounts and the Issuance of Securities of Electric or Gas Utilities

### AUTHORITY TO REGULATE ISSUANCE OF SECURITIES

The following State statutes authorize public service commissions to regulate the issuance of securities by electric or gas utilities:

| *States* | *Statutory Reference* |
|---|---|
| Alabama | Secs. 9744-9753 Code of Ala., 1923. |
| Arizona | Sec. 708, Rev. Code of Ariz., 1928. |
| Arkansas | Act 324, Acts of Gen. Assembly of Ark., for 1935, Sects. 58 and 59. |
| California | L. 1915, Ch. 91, Sec. 52 (a). |
| Connecticut | Ch. 191, Public Acts of 1935. |
| District of Columbia | D. C. Code, T. 26, Sec. 99. |
| Georgia | Sec. 2065, 1926 Code. |
| Illinois | R. S. 1933, Ch. 111a, Sec. 35. |
| Indiana | Ch. 5, Pub. Serv. Acts, Secs. 54-503, 54-504. |
| Kansas | Sec. 66-125, Gen. Sts. of Kans., 1935. |
| Kentucky | Sec. 3359-24, Ky. Stats. |
| Maine | Sec. 41, Ch. 62, Rev. Stats. |
| Maryland | Sec. 392, Art. 23, Ann. Code of P. G. L. of Md. |
| Massachusetts | Ch. 222, Mass. Acts of 1935. |
| Michigan | Sec. 11077, Compiled Laws of 1929. |
| Missouri | Secs. 5196-5198, Rev. St., 1929. |
| Nebraska | Secs. 75-1201, C. S., 1929. |
| New Hampshire | Ch. 24, Sec. 1, P. L. of N. H. |
| New Jersey | Sec. 167-24 (e) & (f), Supp. |
| New Mexico | Sec. 18, Chap. 84 (H. B. 29) Laws 1941. |
| New York | Sec. 69, Public Service Law. |
| North Carolina | C. S. 1112 (18); Sec. 18, Ch. 307 P. L. 1933. |
| North Dakota | Sec. 4609c 20; Supp. C. L. of N. D. |
| Ohio | Secs. 614-53-54-55, Gen. Code of Ohio. |
| Oregon | Ch. 441, Ore. L. 1933. |
| Pennsylvania | Art. VI, Secs. 601-604, L. 1937. |
| Rhode Island | Ch. 2345 P. L. of 1926. |
| South Carolina | 1932 Reg. Act, Sec. 1 (i), Sec. 2 (m) & (s). |
| Tennessee | Sec. 5452 (d), Code of Tenn. |
| Vermont | Sec. 5953, P. L. Vt. Also Secs. 5991 & 6106. |
| Virginia | Ch. 160A, Secs. 4073 (1)-4073 (16). |
| Washington | Sec. 2, Ch. 540, L. 1933. |
| Wisconsin | Ch. 184, Wisc. Stats. |

The following States have no such statute:

| | |
|---|---|
| Colorado | Montana. |
| Delaware [1] | Nevada |
| Florida [2] | Oklahoma |
| Idaho | South Dakota [2] |
| Iowa [3] | Texas [2] |
| Louisiana | Utah |
| Minnesota [2] | West Virginia |
| Mississippi [2] | Wyoming |

## AUTHORITY TO PRESCRIBE UNIFORM SYSTEM OF ACCOUNTS

The following State statutes authorize public service commissions to prescribe a uniform system of accounts for electric or gas utilities:

| States | Statutory Reference | Date of First Order Adopting Uniform System of Accounts |
|---|---|---|
| Alabama | Secs. 9786-9788, Code of Ala., 1923 | February 6, 1924. |
| Arizona | Sec. 3, Const. Art. XV | 1926. |
| Arkansas | Act 324, Acts of Gen. Assembly of Ark., 1925, Secs. 22 (a) & 8 (c) | January 1, 1943. |
| California | Sec. 48, Act 6386, G. L. | January 16, 1916. |
| Colorado | Sec. 33, p. 480, L. 1913 | November 1, 1923. |
| Connecticut | Sec. 3602, Gen. Sts. Rev. 1930 | 1930. |
| District of Columbia | Sec. 32-37, T. 26, D. C. Code | October 24, 1923. |
| Georgia | Sec. 2663, Code 1926 | October 27, 1913. |
| Idaho | Sec. 59-524, —525, Id. Code Ann | 1919. |
| Illinois | Secs. 11-15, Ch. 111 2/3, R. S. 1933 | |
| Indiana | Sec. 54-209, P. S. C. Acts | May 1, 1913. |
| Kansas | Secs. 66-122, 123, R. S | October 27, 1922. |
| Kentucky | Sec. 4 (i), p. 589, L. 1934 | 1935. |
| Louisiana [1] | (See note) | |
| Maine | Secs. 17-21, Ch. 62, R. S | July 1, 1915. |
| Maryland | Sec. 388, Art. 23, Ann. Code, P. G. L. of Md. | June 12, 1911. |
| Massachusetts | Ch. 382, Mass. Acts of 1887 | 1887. |
| Michigan | Sec. 11098, Ch. 209, C. L. | December 18, 1914. |

[1] The Louisiana Commission advises that it has adopted the gas and electric systems of accounts prescribed by the National Association of Railroad and Utilities Commissioners which systems of accounts have been used by the Louisiana Commission for a number of years.

See "State Commission Jurisdiction and Regulation of Electric and Gas Utilities" (F.P.C., Jan. 1941).

| States | Statutory Reference | Date of First Order Adopting Uniform System of Accounts |
|---|---|---|
| Missouri | Sec. 5190, Mo. Stats. Ann. | January 1, 1915. |
| Montana | Sec. 3885, Code of 1921 | 1913. |
| Nebraska | Sec. 1, Const. Art. X | None adopted. |
| Nevada | Sec. 6109, C. L. | 1923. |
| New Hemisphere | Sec. 7, Ch. 240, Public Laws | 1914 |
| New Jersey | Sec. 167-17 (d), Supp. | December 3, 1912. |
| New Mexico | Secs. 28 and 30 of P. U. Act, Chap. 84, Laws of 1941. | January 1, 1942. |
| New York | Sec. 66, subd. 4, P. S. L. | October 21, 1908. |
| North Carolina | C. S. 1112 (13); Sec. 13, Ch. 307, P. L. 1933 | November 18, 1931. |
| North Dakota | Ch. 192, L. 1919 | July 29, 1921. |
| Ohio | Sec. 614-10, Gen. Code | January 3, 1918. |
| Oklahoma | Okla. Stats. 3620 | July 1, 1914. |
| Oregon | Or. C., Sec. 61-211 212 | June 16, 1913. |
| Pennsylvania | Sec. 1404, Art. V. P. U. Law | November 19, 1918. |
| Rhode Island | Sec. 58, Ch. 253, G. L. 1923 | January 1, 1937. |
| South Carolina | Sec. 2 (o), 1932 Reg. Act. | January 1, 1931. |
| Tennessee | Sec. 5451, Tenn. Code | December 28, 1922. |
| Utah | Sec. 76-4-22, R. S | December 26, 1922. |
| Vermont | Sec. 6096, P. L. of Vt | May 27, 1929. |
| Virginia | Sec. 4070, Va. Code | December 11, 1920. |
| Washington | Sec. 2, Ch. 151, L. 1933 | January 29, 1913. |
| West Virginia | Sec. 8, Art. 2, Ch. 24, Code of W. Virginia | March 6, 1923. |
| Wisconsin | Sec. 196.06 Wisc. Stats | December 15, 1908. |
| Wyoming | Sec. 94-144, R. S. 1931 | March 13, 1923. |

The following States have no such statute:

| | |
|---|---|
| Delaware [1] | Mississippi [2] |
| Florida [2] | South Dakota [2] |
| Iowa [3] | Texas [2] |
| Minnesota [2] | |

[1] Delaware has no regulatory commission.

[2] Regulatory Commission of this State has no jurisdiction over electric or gas utilities.

[3] Regulatory Commission of this State has no jurisdiction over valuation or rates of electric utilities.

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551452—43——1

# In the Supreme Court of the United States

OCTOBER TERM, 1943

No. 34

FEDERAL POWER COMMISSION, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONERS

*v.*

HOPE NATURAL GAS COMPANY

*ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT*

## SUPPLEMENT TO BRIEF FOR PETITIONERS

## EXPRESSIONS OF OPINION CONCERNING THE "FAIR VALUE" DOCTRINE OF SMYTH V. AMES AND THE RULE OF "PRUDENT INVESTMENT"

### INTRODUCTION

For more than forty years extensive discussion has revolved about the proper and practicable basis for public utility rate regulation, a discussion which has not yet been definitively terminated. The crux of the problem has been the selection of the proper formula for computing the base upon which a fair annual return and an annual depreciation allowance are to be granted in the form of rates.

At the center of the controversy have been found two opposing concepts: one adopting the "present fair value" of the utility's property as the just rate base; the other, the amount "prudently invested" by the utility in its business.

This Supplement presents materials taken from the writings of legal and economic authorities, which, in our view, thoroughly discredit the "fair-value" formula, and demonstrate that (1) it is unsound and unworkable, (2) its results are unreliable, and (3) it is unduly time-consuming and costly. The "fair value" rule has been condemned by an overwhelming weight of economic opinion, legislative investigations, progressive utility commissions and persuasive judicial opinions, and it is their verdict that the rule has been a failure in practice and is virtually useless as a guide to equitable rates.

We also present materials in this Supplement which show that none of these vices inheres in the "prudent-investment" rule, and that it is on the contrary a simple, expeditious and sound method of evolving rates which are fair to the utility, to its investors and to its customers. In the belief that it will be helpful in arriving at a valid basis for rate-making, we present a résumé of significant analyses and discussions of this problem.

## I. THE "FAIR VALUE" DOCTRINE

The need for reexamination of the "fair value" rule was succinctly stated by Mr. Gerard Henderson in a brilliant critique of public utility valuation:

> The relation between the public utility and the community cannot be expressed in

terms of a simple, quantitatively ascertainable fact, for the relation involves numerous and complex factors which depend on compromise and practical adjustment rather than on deductive logic. The whole doctrine of *Smyth* v. *Ames* rests upon a gigantic illusion. The fact which for twenty years the court has been vainly trying to find does not exist. "Fair value" must be shelved among the great juristic myths of history, with the Law of Nature and the Social Contract. As a practical concept, from which practical conclusions can be drawn, it is valueless. (Henderson, *Railway Valuation and the Courts,* 33 Harv. L. Rev. 1031, 1051.)

The overwhelming weight of economic authority in the public utility field rejects the "fair value" doctrine of *Smyth* v. *Ames.* According to Bonbright, *The Valuation of Property,* Vol. II, at p. 1081:

> The sharp disagreement among American economists as to what constitutes a proper rate base makes all the more striking their apparently unanimous agreement that, whatever this base should be, the one measure which is outlawed is the very measure which the Supreme Court has held to be controlling—namely, the "value" of the properties as of the time when the rates are under consideration. This position is not confined to those writers who support the "prudent-investment" or the "original-cost" basis of regulation and whose views are therefore most obviously opposed to the accepted legal doctrine. It is accepted no less uncompromisingly by such writers as Brown (Professor Harry Gunnison Brown) and Graham (Professor Willard J. Graham), whose defense of the replacement

> cost theory will be noted below, and by the late President Hadley, who objected to any rate control which makes the fairness of the rates depend upon the adequacy of the corporate earnings. Hadley, indeed, once remarked that he could recall but one economist who agreed with the courts in accepting "value" as a measure of the rate base, and he added that this economist was dead. (Citing President A. T. Hadley's testimony before the New York State Commission on the Revision of the Public Service Commission's Laws, Hearings, p. 730 (Albany, 1930) and his address on "The Meaning of Valuation," in 19 *Am. Econ. Rev. Supp.* 173 (March 1928).)

Professor Irston Barnes of Yale University has thus summarized the "fair value" doctrine's failures and defects:

> Judged in terms of the criteria of effective regulation, the score for fair-value is not impressive. By focusing attention on the corporation, the effects of rate control on investors are ignored or relegated to a position of secondary importance. Unearned income and undeserved losses may be visited upon consumers and investors. The present-fair-value method has not been an equitable method of regulation under the circumstances that have prevailed in the past and does not promise greater fairness for the future.
>
> * * * * *
>
> On the theoretical level, the fair-value program of regulation encounters unanswerable objections. The legal theory is accurately characterized as vague and inconsistent. The eminent-domain fallacy is found to have infected the whole body of

> regulatory thought with respect to the fair-value standard. Finally, the nature of the inquiry and the character of the evidence presented in the search for fair value are not calculated to afford a scientific or satisfactory method of rate control. (Barnes, *The Economics of Public Utility Regulation* (1942) pp. 562–3.)

Professor Robert L. Hale, of Columbia University has observed that this concept "serves merely to divert the time, attention, and funds of regulating bodies out of the proper channels into one of the most unreal fields of speculation in which the minds of metaphysicians have disported themselves since the days of medieval schoolmen." *The "Physical Value" Fallacy in Rate Cases,* 30 Yale L. J. 710 (1921).

A. THE FICTIONAL CHARACTER OF "REPRODUCTION COST"

The most serious defect in the use of present fair value, and hence of reproduction cost, in the determination of utility rates is its utter lack of precision. The idea of reproduction cost is at first blush a simple one, and might indeed be workable in the case of a property of small size and little complexity.

> The original conception of reproduction undoubtedly grew out of simple conditions, such as would be met in estimating the cost of reproducing a building or a single structure. In this case, the difference between the original cost of the building or structure and the reproduction estimate would be due wholly to change in prices of labor and materials and the change in methods of doing work. (American Society of Civil

Engineers, *Valuation of Public Utilities*, 81 Transactions (1917) p. 1362.)

The difficulty is that a utility comprises a vast amount of property which is both far-flung and exceedingly complex.

> This simplicity of condition does not obtain in the case of a great property, the actual construction of which has extended over many years, many of the plant units of which have been renewed or replaced by larger ones than were originally installed, which has undergone changes and alterations, and the history and records of which have not been kept fully and completely. In such a case the making of a complete estimate of the cost of replacement or reproduction is a very involved undertaking. (*Id., loc. cit.*)

As a result, the determination of reproduction cost is extremely difficult, but, what is worse, no two experts can reach an agreement upon the figure to be used.

> To this criticism of the vagueness of the court's rule as to valuation can be added another, namely, the practical difficulty of making any valuation at all. In every case examined, there has been a great conflict in evidence. Often, when two valuation experts have been employed by the same party, these experts have each made valuations that differed by a great amount. The difficulty seems to be that of making any accurate valuation of the various assets, tangible and intangible, that make up the plant of a modern public utility. (Howell, Ben R., *Recent Developments in the Application of the Rule of Smyth* v. *Ames in*

*Valuation Proceedings in the Federal Courts,* 3 Tex. L. Rev. 412, 432 (1924).)

This difficulty is also recognized by the Committee on Valuation of the American Society of Civil Engineers:

> The practice of those engaged in valuation work, from the beginning of such work up to the present time, has varied widely in the matter of determining the cost of reproduction. Some base such cost on existing physical conditions, others on historic conditions, and still others combine the two. Some engineers have included only those physical property units which were actually created in the construction of the property, that is, they have used historic conditions, as to items of cost, with present-day prices for labor and material. Others have used substitute units, or historic prices, or original instead of present methods of work, and still others have used original conditions, original prices, and original methods, in making an estimate of reproduction cost.
>
> This failure of engineers engaged in valuation practice to agree on a uniform conception of reproduction has cast some doubt on the real worth of Cost of Reproduction as one of the measures of value. (American Society of Civil Engineers, *Valuation of Public Utilities,* 81 Transactions (1917), p. 1359.)

The "irrationality" and "unworkability" of reproduction cost estimates have thus been described:

> For as soon as we begin to deal with reproduction cost we desert the solid ground of fact and enter the realm of guesswork and

> partisan interpretation. The determination of the cost of reproducing a given property for the purpose of fixing a rate base has come to be one of the most involved and expensive tasks in the utility business. It requires a battery of engineers and accountants working months at a time and coming to conclusions with which no other like group working independently would agree.
>
> * * * * *
>
> * * * if reproduction costs are to be figured on the cost of the identical plant, a plant that would not be reproduced under any modern conditions, equipped with machinery that could not be procured in any market, and for which price lists are no longer available, as has proved to be the case, we find ourselves in an unreal world, where the imagination and ingenuity of acquisitive spirits are given a free and untrammeled rein. The irrationality and the unworkability of this legal fiction of fair value, embodying the accepted theory of reproduction cost new, becomes the more apparent the more one familiarizes himself with the processes that have been devised in its name. (Mosher & Crawford, *Public Utility Regulation*, pp. 192–3, 214.)

A classical example of the wide variations in determining fair value under the reproduction cost theory is contained in the dissenting opinion of Mr. Justice Stone in *West* v. *Chesapeake & Potomac Telephone Company*, 295 U. S. 662, 691, note 7. The reference shows the following variations in results obtained by engineering appraisals of the telephone property involved in *New York Telephone Company* v. *Prendergast*, 36 F. (2d)

54—variations covering a range of almost $250,000,000:

| Estimating body | Valuation | Increase over the Commission valuation |
|---|---|---|
| | | *Percent* |
| Majority of Commission | $396,915,493 | |
| Statutory Court | 397,207,925 | 8.2 |
| Minority of Commission | 405,502,993 | 10.5 |
| Master's report | 518,109,584 | 41.2 |
| Company claim based on Whittemore appraisal | 528,753,738 | 44.1 |
| Company claim based on Stone & Webster appraisal | 615,000,000 | 67.1 |

Another striking variation of estimates occurred in the *Indiana Telephone Case:*

> A typical instance of this difficulty is seen in the case of *Indiana Bell Telephone Co. v. Public Service Commission* [300 Fed. 190], in which there was a difference of $4,000,000 between the estimates of two of the commission's engineers. In this same case the difference between the highest valuation offered and the lowest was $19,000,000, or 45 percent of the highest estimate. Experts, working in good faith and including the same items of valuation, arrive at results so far apart as to prove that such proceedings are of little value in determining the true worth of the property. It can thus be seen that, although the courts are working out the elements, or items, that form a proper basis for valuation, the value to be given these items can never be determined with any degree of certainty. The best that can be said for the valuation of public utilities under the present method is that the courts have by their guesses as to the correctness of the expert's guesses, made another guess as to the probable value of the utility in question as a basis for the determination of a rate which will assure a fair return on

the investment. (Howell, *op cit.*, p. 6, at p. 432.)

It is common knowledge that no two field parties will arrive at the same inventory of physical quantities, and it is likewise common knowledge that a recheck by one field party of the work of another always discloses discrepancies. An analysis and comparison of reproduction-cost estimates utilized in a large number of rate cases reveals a startling variation between company and commission as to the value of the same property, the latter's in some instances being little more than half of the company's (see Appendix *infra*, pp. 91–103). These discrepancies are not avoided by experts, for in attempting to determine cost of reproduction new, there are possible variations of as much as 100 percent between the estimates of engineers testifying on behalf of a utility and that of commission experts. (Richberg, *A Permanent Basis for Rate Regulation*, 31 Yale L. J. 263, 269 (1922).)

In analyzing *McCardle* v. *Indianapolis Water Co.*, 272 U. S. 400, valuation for rate-making purposes, one commentator has observed:

> In addition to the expert guessing contest involved in estimating reproduction cost, according to present or past prices, the opinion also adds an additional gambling factor in requiring "an honest and intelligent forecast as to probable price and wage levels during a reasonable period in the immediate future." For at least one hundred years (and probably for several thousand years) commerce has been offering its greatest prizes to men who could make honest and intelligent forecasts of

> future prices. Today the management of any large business would pour wealth into the lap of the inspired genius who could make such forecasts. The question is presented as to whether, when such forecasts are impossible (as they are most of the time), public utility commissions should make any effort to regulate public utility rates. Relying upon past prices alone, it would become evident in practically every case, by the time the case reached the Supreme Court, that there had not been an "honest and intelligent forecast" of future prices. The illusion * * * that a reliable forecast of future prices can be made, is on a par with the illusion which also radiates from the opinion, that there is such a thing as a "relatively permanent price level." (Richberg, *Value—By Judicial Fiat* (1927), 40 Harv. L. Rev. 567, 572.)

Speaking of reproduction-cost estimates of the Interstate Commerce Commission, Professor Sharfman has said:

> It must be evident from the foregoing analysis that it would be the simplest of tasks to point out numerous sources of possible error and miscalculations; there are scores of items concerning which equally competent judgments might produce widely divergent results. Final figures so painfully precise, and yet built upon an hypothesis so markedly unreal, are almost ludicrous in their exactness. Even with conjecture reduced to a minimum, the results are still too conjectural to be altogether acceptable as objective findings. * * * The shortcomings of the results spring from the inherent nature of the reproduction-cost

> method, rather than from any want of skill or reasonableness in its practical application. It must be borne in mind, too, that the Commission had no alternative in the matter of ascertaining and reporting reproduction costs—this task was specifically imposed upon it by the terms of the Valuation Act. (Sharfman, *The Interstate Commerce Commission*, Vol. III–A, p. 185.)

The effect of the indefiniteness of the concept of reproduction cost is that the rate basis is entirely unpredictable. The utility and the regulatory commission are, until the final decision, entirely in the dark, and so is the investor. It is for this reason, among others, that Professor Robert Hale urges the abandonment of the rule of *Smyth* v. *Ames*.

> The time now seems ripe for the Court to overrule *Smyth* v. *Ames* and to repudiate the principles that the rate-making power is subject to limitations pertinent only to the power of eminent domain, and that rates, to be valid, must yield a fair return on "value." It would seem to the present writer desirable if, in a case presenting the issue, the Court should expressly declare (what it held in effect in the *Lindheimer* case) that rates which enable the company to operate successfully and to raise the necessary money (which they do if they yield a fair return on the actual prudent cost), are valid, quite regardless of what return they yield on a "value" in the determination of which reproduction cost plays a part. This does not mean that it would be desirable for the Court to substitute for the rule in *Smyth* v. *Ames*, a requirement that rates must in all cases yield a fair return

on actual prudent cost. A state's policy which fixes rates on that basis cannot be pronounced the only one that is not "arbitrary." The line between those rate regulations that are arbitrary and those that are not, like the line between other valid and invalid exercises of the police power, can better be left to be pricked out as future occasions arise. But counsel could at least advise clients that the validity of particular rates will be determined with reference to facts pertinent to realities. As the decisions now stand, they cannot advise whether the determination will be made with reference to such facts (as in the *Lindheimer* case), or with reference to so-called values in the determination of which no prediction can be made of the weight which the Court will attach to the various elements of actual cost, replacement cost and "going value." They cannot advise whether a company's prosperous condition will be taken as evidence of the adequacy of its rates (as in the *Lindheimer* case), or as evidence of large "going value" whose existence proves the rates to be inadequate (as in the *McCardle* case); nor whether the good physical condition of the company's property will be taken to show that the annual depreciation allowance is excessive and that the rates may accordingly be reduced (as in the *Lindheimer* case), or to show that the "present value" is high and the rates accordingly "confiscatory" (as in *Board of Public Utility Commissioners* v. *New York Telephone Co.*). Certainly *all* of the conflicting decisions of yesterday cannot be the law of today. (Hale, Robert L., *Conflicting Judicial Criteria of Utility Rates—The Need for a Judicial Restatement*, 38 Columbia L. Rev. 959, 976, 977 (1938).)

The unlimited scope afforded the imagination by reproduction-cost is graphically related by Carl I. Wheat, a practitioner with broad experience:

> Indeed, when it comes to the actual process of arriving at such a figure for a public utility system, as this "reproduction cost" process has been built up in recent rate cases, those who prefer to keep their feet on sound ground must part company with the so-called "experts." In contrast to the realistic approach to the problem, we discover that under this second approach there has been erected a great structure of imaginary and imaginative potential and hypothetical "costs," totally unrelated to reality. And the argument is made that this is what the Supreme Court really meant by its use of the term "present cost." Here, indeed, we discover the *ignis fatuus* of "valuation."
>
> It is on this second premise that the "experts" assert the necessity for including the various unreal elements above mentioned, *i. e.*, the nonexistence of the existing plant, the coming to town of a promoter, his speeches to the local clubs offering to build a plant, the excitement and delight of a receptive populace, the preparation of blueprints, the obtaining of new franchises under social, legal, and political conditions not effective when the plant was originally built, the cutting and replacing of pavement not historically cut or replaced, the cost of meeting increased traffic and city growth, and a myriad of like "difficulty factors" that were not present when the plant under consideration was actually constructed, together with divers other hypothetical costs which an actual physical "reproduction" of the property might conceivably entail.

Wheat, Carl I., *The Present as Compared With the Original Cost of Construction*, 20 Pub. Util. Fort. pp. 131, 134–135 (1937).

In the article referred to above Mr. Wheat cites a striking example of the unreality of the reproduction cost approach:

> In the Los Angeles Case the book cost of the company's properties totaled $169,000,000; the cost to "reproduce" the properties at the time of the inquiry was claimed to be $182,800,000; and the claim of "fair value" after taking into consideration admitted accrued depreciation, was $175,000,000. We are here concerned solely with the basis of the company's assertion of what it would cost to "reproduce" the properties.
>
> That figure was based upon an inventory to which certain derived "unit costs" were applied. Cross-examination of the company's witnesses disclosed that this "appraisal" included $3,171,400 to represent *the cost of cutting and replacing paving over conduits in instances where no such costs were historically incurred*, though the Supreme Court had but recently declared that "the cost in imaginary conditions of cutting and restoring pavements was not an increment of value." It further appeared that the total included $1,033,000 to represent *telephone station installations and associated drop wires which had actually been abandoned at the time of the appraisal.*
>
> Moreover, it was brought out that no less than $1,623,000 was included to represent "*left-in disconnects*," *i. e.*, telephone disconnected but left by the company, for its own convenience, on the former subscribers' premises. (Picture the imaginary promoter rushing hither and yon over the new

> system feverishly "reproducing" this large amount of already disconnected and idle equipment!) In addition, the sum of $405,500 was included to represent imaginary *organization and franchise costs in excess of those actually incurred in the development of the system*, an item that had recently been specifically disapproved by the Supreme Court. (*Op. cit.* at pp. 140–141.)

But the farthest flights of fancy within the realm of "reproduction-new" occurred in respect to a tax item and automobiles. The Telephone Company claimed $20,610 as hypothetical taxes during construction which might have had to be paid on hypothetical interest income during construction (*op. cit.*, pp. 140–141), and the method by which the utility sought to ascertain the reproduction value of automobiles is thus described by Mr. Wheat:

> Curiously enough, the urge for consistency in presenting "reproduction cost" estimates in the Los Angeles Case led the company's experts into a peculiar *cul-de-sac* when it came to automobiles. Notwithstanding the fact that the southern California used-automobile market is the largest in the United States, and that actual used-car prices are published, are fully standardized, and are readily ascertainable, the company's witnesses decided to "reproduce" its automobiles. To this end they went through the following highly illuminating process:
>
> "(1) They obtained from automobile piece-part catalogues the prices of some thirty separate parts (representing, said they, some 60 per cent of the total vehicle), (a) for the year each make and model of vehicle was purchased, and (b) for Decem-

ber 31, 1934, the date as of which the 'valuation' was being made;

"(2) They ascertained the ratio which the sum of these piece-part prices for the year of purchase bore to the sum for December 31, 1934;

"(3) They applied this ratio to the total cost of vehicles of each particular type and age, as shown on the books, and

"(4) They labeled the resulting figure 'reproduction cost new' of automobiles."

In such fashion did they obtain the "cost new" of a 1929 Ford in 1934! If such a process bears any relation to "value"—under *any* definition of that term—it is difficult to perceive it. Yet this is but one example of the lengths to which many otherwise sane men have gone when attempting to build up "reproduction cost" figures in rate cases under the second theory of its nature. (*Op. cit.* at p. 142, footnote 18.)

The National Association of Railroad and Utilities Commissioners, through its Committee on Progress in Public Utility Regulation, recently had this to say with respect to the "fair value" doctrine and the delusive element of reproduction-cost:

> For more than a generation now, utility commissions have struggled with a legalistic scheme of rate regulation based upon various types of valuation procedure. As these processes have usually been applied, they have done violence to various laws of economics. Aside from the utility field, there is virtually no other segment of American business life in which the price structure is established upon the basis of certain valuation theses. Other price structures are

> competitive, but competitive criteria are lacking in the utility field. * * * The valuation procedure, especially when based on unrealistic studies of reproduction costs, fail signally to achieve this result. Because of this fact, the entire procedure has been criticized more than it has been defended. (National Association of Railroad and Utilities Commissioners, 53rd Annual Proceedings (1941) pp. 369–370.)

There is a further factor tending to make the reproduction cost entirely unlike the expense that would be incurred if the utility were actually to be reproduced. The determination of reproduction cost involves the wholly unfounded assumption that current prices can be accurately ascertained:

> * * * As prices go upward or downward, either as to labor or materials, or as the technological processes of construction or manufacture of equipment change, the amount of the reproduction cost is immediately affected. But these are all unweighted factors, which are not accurately recorded, constantly vary, and hence cannot be determined without wide differences of opinion as to their quantitative significance. Consequently, every attempt to readjust the sum is accompanied by extended litigation, cumbersome proceedings, bulky records, and tremendous expense. (Bauer, John, *Reproduction Cost and Desirable Public Utility Regulation*, 2 Journal of Land and Public Utility Economics 408, 415 (1926).)

There are indeed several ways in which the ascertainment of current prices may be entirely false. There is not only the possibility of error which attends the determination of most economic

facts, but there is a serious danger of a fictitious price level.

> The use of "spot prices" on equipment purchased from the Western Electric Company (though the reflection of "precipitate" price changes had been frowned upon in the West Case) also enabled the utility to take advantage of a sudden recent and rather large price increase by that company, and to claim some $7,000,000 more than would have resulted from the adoption of a 5-year average pricing period (that being the "construction period" actually adopted by the company in its "reproduction cost" estimate). And this in the face of generally declining price levels in respect to almost all other commodities over that period. The fact is that such Western Electric price increases had practically no direct effect on the capital structure of the plant under consideration, since the construction program of this utility had been negligible in amount since this price increase, and in fact had been negligible in amount for some time prior thereto. Thus, by a mere scratch of the pen, the Western Electric Company (another subsidiary of the defendant utility's parent corporation) had created a basis for claims of increased "reproduction costs" totaling millions of dollars in this single case. (Wheat., *op. cit.*, p. 14, at p. 141.)

The former general counsel of the Illinois Commerce Commission likewise draws attention to the possibilities of price rigging:

> But inasmuch as the utility company is usually a prospective as well as a former customer of the manufacturer in such a

case, it is a strain on credulity to assume that the estimated price has much probative force; yet no one is in a better position to make an estimate.

The same difficulty exists, though usually in lesser degree, with quotations of prices even where the items are not obsolete, particularly where an item is a specialty of one manufacturer. An outstanding example is in the case of telephone apparatus of Bell Telephone companies. This is nearly all made by the Western Electric Company, an affiliate; and the price policy of that company has been the reverse of that necessarily followed by competitive companies. When demand falls off, as has happened during the depression, the Western Electric Company raises prices; when demand and production increase, the prices tend to fall. As a reproduction cost appraisal involves the pricing of a vastly greater amount of apparatus than is actually being produced for the Company in question, current Western Electric prices have little to do with such a situation. A somewhat similar condition seems to exist in the case of electrical apparatus made by the General Electric and other large manufacturers. Prices of much of such equipment have gone up during the depression, and the Federal Trade Commission has attacked price-fixing in some such instances. (Booth, Harry R., *Prudent Investment, Fair Value and Public Utility Regulation*, 1 National Lawyers Guild Q. 229, 240 (1938).)

In times of depression, current price data may be nebulous:

* * * The difficulty of securing adequate current price data at a time when purchases of construction materials are

> negligible or non-existent will tend to the use of older data, and thus obscure to a considerable measure the actual reduction in material costs. Reliable labor costs reflecting actual practice are difficult to obtain. (Lilienthal, David E., *Regulation of Public Utilities During the Depression*, 46 Harv. L. Rev. 745, 754 (1933).)

Shifting prices invite inflated estimates:

> The impossibility of having reproduction cost as the general basis of rate making is especially clear if we once face the fact that prices are continually shifting. * * * Among the difficulties of valuations on the reproduction cost basis, are various unjustifiable claims or applications of the theory. * * * The theory lends itself easily to various hypothetical and fanciful applications in the hands of valuation experts financially interested in forcing the results to the maximum limits. * * * [The] actual determination [of intangible construction costs] is not entirely simple, but the reproduction cost principle invites particularly the flight of fancy and their consequent inflation beyond all reason. (Bauer, *Effective Regulation of Public Utilities*, (1925) pp. 108, 131–133.)

B. THE FALLACY OF THE "COMPETITIVE PRICE THEORY"

One of the original arguments advanced in favor of the use of reproduction cost as a basis for valuation is that it tends to maintain rates such as would be charged under a system of competition. The competitive price theory has been stated by Professor Bonbright as follows:

> According to this theory, the object of public service regulation is to deprive util-

> ity companies of the power to charge a monopoly price. Rates should therefore be fixed at a level which they would probably reach if they were regulated, not by the fiat of government, but by the forces of normal competition. But under competitive conditions the prices of services and of commodities tend to equal their cost of reproduction. Therefore, under conditions of monopoly, utility prices should be made to equal the cost of reproducing the service rendered. And by cost of reproducing the service is meant the price which would just be sufficient to induce investors to put up a new plant and to give service similar to that given by the present company. (Bonbright, James C., *Depreciation and Valuation for Rate Control*, 27 Columbia L. Rev. 113, 124–125 (1927).)

From an economic standpoint there are serious flaws in the competitive price theory. It is an attempt to apply the competitive principle to a regulated monopoly by a logical *tour de force*. This is pointed out by the same authority:

> In bringing to a close this discussion of the valuation problem, the point that should be stressed above all others is the folly of attempting to regulate the prices of public monopolies so that they will conform as closely as possible to the prices that are assumed to prevail under conditions of free competition. Overlooking the fact that the proposed imitation of competition is a very poor one, overlooking the fact that a governmental control of rates designed to yield a stated return on reproduction costs is not even a good caricature of the automatic control of prices that takes place in a dynamic competitive market, we must still recognize

that the attempt to carry over into the field of the large-scale monopoly the same price system that is assumed to prevail in the field of the small competitive enterprise, is bound to result in a serious misfit. One reason why it is a misfit is that the competitive price system disregards so ruthlessly the financial needs of the individual producer. To the low-cost producer it yields profits far beyond the current rate of interest on invested capital; to the high-cost producer it brings deficits that spell bankruptcy and ruin. As long as competition is full and free this process, harsh though it be to the unfortunate producer, may serve very well the interests of the consumer. For what matters it to him that any one producer is crippled, so long as he can turn to a more fortunate rival for his necessary services and commodities? Not so under monopoly. Not so with a railway that is alone in serving a community. Why, say the defenders of reproduction cost, should railway security holders be given any greater insurance against the fluctuations of price levels than is given to the holders of securities in an unregulated enterprise? The answer is that when the investors in small competitive enterprises fall, they may fall alone, but when the holders of railway securities fall, they force the whole community to become unwilling mourners of their downfall (Bonbright, James C., *The Economic Merits of Original Cost and Reproduction Cost;* 41 Harvard L. Rev. 593, 621–622 (1928).

A variation of the competitive price idea has been advanced in support of the theory of reproduction cost. It has been contended that the utility investor will receive the benefit of a flexible income; his return will thus be relatively constant

in terms of purchasing power. Thus, it is said, as prices rise utility values will also rise, increasing the investor's receipts and protecting him from the effects of a general rise in prices. One defect in this reasoning is pointed out in a recent treatise upon the subject of regulations of utilities:

> * * * the argument that, since reproduction costs fluctuate widely this basis of valuation is more equitable, in that the fluctuations tend to parallel the fluctuations in the general commodity price level, is partly fallacious. Reproduction costs include a large percentage of labor costs, while the percentage of labor costs in the general price level may be much less. Moreover, the general price level includes the prices of many items that are not included in reproduction estimates (Wilson, Herring & Eutsler, *Public Utility Regulation* (1938) p. 127).

The assumption that the income of utility investors will be stabilized under such a rule contains a fundamental error:

> These advocates [of the reproduction cost theory] have recently shown signs of shifting their ground while yielding to attacks upon the illogical "replacement value" theory. They have urged that the investment in the dollars of bygone years should be translated into a "present investment," that is, the amount of money having the purchasing power of the dollars of yesterday in the commodities of today. The original investment, they suggest, was of a certain purchasing power which, although stated in money at the time of investment, must be restated now in terms of equivalent purchasing power. This claim involves the

plausible suggestion that owners of public utility securities should be assured a constant income in purchasing power rather than a constant income in dollars that have a fluctuating purchasing power.

One answer to this new line of argument is that the large amount of investment in public utilities is represented in securities having a fixed return, such as bonds and preferred stock. It is hardly reasonable to ask the Government to provide a fluctuating return for these investors, which they will not be able to obtain, but which will be appropriated solely for the benefit of the common-stock holders! Another answer is that it is hardly appropriate for the Government to establish a rule which will favor one class of investors at the expense of the entire community. * * * The new claim that investors should be protected against loss from the reduced purchasing power of the dollar is utterly inconsistent with the old theory of basing rates upon the "value" of the property. (Richberg, Donald R., *The Supreme Court Discusses Value*, 37 Harvard L. Rev., 289, 297–299 (1924).)

This fallacy in the reasoning of the advocates of reproduction cost is pointed out in a report by the Federal Trade Commission to the United States Senate dealing, among other things, with valuation:

> Far transcending any other reply to this argument of the proponents of reproduction cost, however, is that it entirely overlooks the fact that public utilities are almost wholly financed through fixed income-bearing securities, that is, bonds and preferred stocks. The Federal Trade Commission's investigation of the public-utility industry covering 91 representative oper-

ating companies engaged in the electric-light and gas business, shows that 70 percent of their capital accounts is represented by outstanding bonds and preferred stocks. What is of further significance is the Commisison's disclosure that write-ups of the capital assets of these 91 operating companies approximate 23 percent, substantially all of which was reflected in the equity stocks. In the light of these disclosures, it would be no serious exaggeration to say that the representative public utilities of the country, including railroads to a lesser extent, are more than 90 percent financed through fixed income-bearing securities.

Manifestly, fluctuations in the price level do not affect the man owning a $1,000 bond on which he receives 6 percent interest, so far as his dollar investment is concerned. It is clear, then, that any speculative gain or loss, due to the price level, is reflected solely in the common stocks of utilities. Yet it has not been seriously suggested by proponents of reproduction cost that all fixed income-bearing utility securities be recalled, and common stock issued in their place (Federal Trade Commission, *Summary Report to the Senate of the United States,* January 28, 1935. Senate Doc. 92, Pt. 73A, 70th Cong., 1st Sess., p. 155).

The fact is that the use of reproduction cost tends to a result precisely opposite to that which its advocates claim for it. Rates are too high after a period of inflation and too low after a period of deflation. See Willis, Hugh Evander, *Significant Changes in Public Utility Law,* 25 Georgetown L. J. 877, 884 (1937).

C. TIME-CONSUMING AND COSTLY VALUATIONS, ATTRIBUTABLE TO THE "REPRODUCTION COST" ELEMENT, HAVE RESULTED IN THE BREAK-DOWN OF RATE REGULATION

The valuation process, requiring as it does the taking of field inventories and the pricing of the inventory items, cannot be accomplished in a short space of time. Many years are frequently required and assumption upon assumption is made before the speculative result is reached. The long time required to complete a rate case has become common knowledge. The *Ohio Bell Telephone* case, 301 U. S. 292, was in process of adjudication about fourteen years. The Missouri Public Service Commission required over 8 years to reach a determination in its proceedings against the Union Electric Light and Power Company, 17 P. U. R. (N. S.) 337; and over 7 years in its proceedings against the Ozark Utilities Company, 18 P. U. R. (N. S.) 408. The North Dakota Board of Railroad Commissioners required almost 3 years in its proceedings against the Northern States Power Company, 15 P. U. R. (N. S.) 126. The New York Public Service Commission consumed at least 5 years in determining reasonable rates for the Long Island Lighting Company, 18 P. U. R. (N. S.) 65. Twenty-seven months after the initiation of its proceedings against the Westchester Lighting Company (15 P. U. R. (N. S.) 299, 318) that Commission stated:

> To continue this proceeding to completion and to fix the permanent rates would require the receipt of additional testimony and evidence on the reproduction cost new of used and useful property—probably both by the company on its own behalf and by the Commission on behalf of the public—de-

preciation with respect thereto, rate of return, as well as completion of the testimony on and possible additional evidence relating to the market value of land and going value. Judging from past experience, at least another two years would probably be consumed in the presentation of this necessary material, which in turn would require that the operating revenues, expenses, and any changes during this period be investigated and evidence presented thereon to bring them down to the date of the final determination.

In his dissenting opinion in the *McCart* case, *supra*, Mr. Justice Black included the following table to illustrate the delays in rate litigation (302 U. S. 435):

| | Bill filed | Decided | Time |
|---|---|---|---|
| United Fuel Gas Co. v. Railroad Comm'n, 278 U. S. 300 | Dec. 1923 | Jan. 1929 | 5 years |
| United Fuel Gas Co. v. Public Service Comm'n, 278 U. S. 322 | April 1925 | Jan. 1929 | 3 yrs. 8 mos. |
| Ottinger v. Brooklyn Union Gas Co., 272 U. S. 579 | June 1923 | Nov. 1926 | 3 yrs. 5 mos. |
| Ottinger v. Kings County Lighting Co., 272 U. S. 579 | June 1923 | Nov. 1926 | 3 yrs. 5 mos. |
| Ottinger v. Consolidated Gas Co., 272 U. S. 576 | June 1923 | Nov. 1926 | 3 yrs. 5 mos. |
| Patterson v. Mobile Gas Co., 271 U. S. 131 | Aug. 1922 | April 1926 | 3 yrs. 8 mos. |
| McCardle v. Indianapolis Water Co., 272 U. S. 400 | Dec. 1923 | Nov. 1926 | 2 yrs. 11 mos. |
| Average | | | 3 yrs. 7 mos. |

The delay involved in the determination of reproduction cost is illustrated by the history of the litigation in *Lindheimer* v. *Illinois Bell Telephone Company*, 292 U. S. 151. The proceedings before the Illinois Commerce Commission to determine rates for the Illinois Bell Telephone Company, initiated in September 1921, did not reach a final conclusion until 12½ years later, in 1934. More

than ten of these years were consumed in litigation in the federal courts subsequent to the Illinois Commission's findings in the case:

> * * * the first order of the Commission in the *Lindheimer* case was issued in 1923, and the hearings preceding that order must have occupied many months. It was not until 1933 that the bill in that case was dismissed. Such a length of time is extraordinary, but few utility valuations, including the length of the commission or court hearings, take less than two or three years. The result is that in a period of depression (even though the utility gives bond to insure refunds to rate-payers) consumers do not receive the benefit of rate reductions when they are most needed, and in a period of rising prices the utilities cannot receive the needed increase in rates when overheads and other costs are constantly increasing. (Note, *Public Utilities—Rate Base—Late Supreme Court Decisions*, 34 Mich. L. Rev. 100, 107 (1935).)

The *New York Telephone Company* case was instituted in 1920 and determined by the New York Public Service Commission in 1924, yet it was not until 1934 that the case was finally settled. See the concurring opinion of Mr. Justice Brandeis in *St. Joseph Stockyards Co.* v. *United States*, 298 U. S. 38, 90.

Of the *New York Telephone* case, which lasted more than ten years and included 37,000 pages of testimony and 3,000 exhibits, the following observation has been made:

> Herein lies the real significance of this case. While it may have lasted considerably longer than the average utility rate

proceeding, it is nevertheless typical of the problems and difficulties involved in all rate cases. It illustrates particularly the fact that the *measure* of return to which a utility is entitled is never clear and definite under the prevailing regulatory system. The reciprocal rights of the utilities and the public remain undefined and variable even after most exhaustive investigation. The more thorough the work, the longer it lasts and therefore the more likely it becomes obsolete before final decision.

This lack of definiteness as to the fundamental factors of rate control is the bane of the existing regulatory process. It is responsible for virtual breakdown of regulation. It creates and perpetuates conflict of interest. It produces trumped-up evidence, protracted hearings, futile appeals, prohibitive expense, and makes systematic regulation as a regular administrative process an impossibility. (Gold, Nathaniel, *An Example of Rate Litigation and Its Significance*, 23 National Municipal Rev. 584, 587 (1934).)

Another example of the devitalizing effect of the "fair value" rule is the *Wisconsin Telephone* case that consumed five years. The utility had about 200 men engaged in an appraisal for two years. The Commission's appraisal work occupied about 100 man-years. 117,266 working papers were the basis of the Commission's appraisal exhibits. The Commission accounting staff devoted about 25 man-years to its exhibits and accumulated 21,746 work sheets. The hearing required many weeks and resulted in a record of 12,106 pages of transcript and 413 exhibits. *Re Wisconsin Telephone Company*, 13 P. U. R. (N. S.) 224, 233 (1936.)

It is impossible to keep the regulatory process current under the prevailing rule, and unless that rule is changed the paralyzing delays in fixing proper rates which it makes inevitable will continue to cripple utility regulation. Many utilities in the United States have never had their property valued and others have had but one valuation in the comparatively long history of valuation in this country. This Court is familiar with the experience of the Interstate Commerce Commission in its efforts to arrive at the fair value of railroad properties in this country. During the period from 1913 to 1931, approximately $178,000,000 was expended by the Government and by Class I carriers in their attempt to carry out the valuation process. (Testimony of Mr. Alfred P. Thom, General Counsel of the American Railway Executives Association before the Committee on Interstate and Foreign Commerce of the House of Representatives, February 5, 1932.) It is common knowledge that the difficulty in the application of the rule of *Smyth* v. *Ames* to railroad valuation was in no small measure the direct cause of the amendment of Section 15a of the Interstate Commerce Act to eliminate the necessity of recurrent valuations. (See testimony of Commissioner Joseph B. Eastman before the Committee on Interstate and Foreign Commerce of the House of Representatives, January 19, 1932.)

There are over 200 natural gas companies under the jurisdiction of the Federal Power Commission with the reported book amount of gas plant exceeding two and one-half billion dollars. Most of the twelve and one-half billion dollars in electric

utility plant is within the Commission's province, and that includes several hundred separate companies. To apply "reproduction-cost" valuation to each utility would pose a staggering task.

The insurmountable burden of pricing utility inventories to estimate reproduction cost, or of trending cost at current prices for labor and material, is not confined to the Federal Power Commission. Other federal and state rate-making agencies have huge utility investments under their jurisdiction. For example, the book investment in railroads is more than 26½ billion dollars; in manufactured gas utilities it is about two billions; and in telephone utilities it exceeds five billion dollars.

Illustrative of the general trend of opinion on this subject is the following quotation of a leading authority in the field:

> * * * had the Court deliberately set out to defeat the whole purpose of regulation and to make public ownership inevitable, it could hardly have pursued this objective more effectively than by its rulings and dicta on valuation. Under the influence of these precedents, commission regulation has become so cumbersome and so ineffective that it may be said, with only slight exaggeration, to have broken down. Even the investor, on whose behalf the constitutional safeguards have been developed, has received no protection against the rebounds from the inflated stock-market prices that are stimulated by the "fair value" doctrine. (Bonbright, *The Valuation of Property*, Vol. II, p. 1154.)

The delay and expense involved in the determination of reproduction cost constitute a

serious practical obstacle to rate regulation. The time-consuming nature of the inquiry has been referred to by Henry C. Attwill, who for many years had been actively concerned with the practical aspects of rate regulation as chairman of the Massachusetts Department of Public Utilities. The valuation system, he writes,

> * * * slows up regulation and in a great measure makes it ineffective. In practice it takes so much time to decide the question of rates when it is dependent upon a valuation, that, at best, but few cases can be decided by a state authority in a year. Where the authority has a hundred or more companies under its supervision, as is usually the case, it is obvious that there can be but little regulation of their rates. Regulation, to be effective, should be reasonably prompt. If the company needs relief, it should receive it promptly; otherwise the relief prayed for may not suffice when granted, as during the time of protracted hearings the situation may be going from bad to worse and the loss must be compensated by additional increases in the rates. On the other hand, if the public is entitled to a reduction it should receive it promptly, as earnings, by the decisions of the courts, become the property of the corporation, and any excess in rates paid by the consumer can never be recovered by him. (Attwill, *Weaknesses of the Valuation System,* American Academy of Political and Social Sciences, Annals, Vol. 159 (1932) pp. 96, 98.)

A student of valuation cases writes:

> * * * an unreasonable length of time elapses before the courts are able to determine the validity of a prescribed rate.

> The *Pacific Gas and Electric Company* Case, reversed by the Supreme Court in 1924, and sent back for another valuation proceeding, has been in the courts since 1913. During that time the amount collected by the company above the rate prescribed by the city has been deposited in trust awaiting the outcome of the suit. In many other instances a period of from one to five years elapses after the publishing of a rate schedule before the validity of the rate is determined. Because changing conditions render the previous valuation of little help in determining the question of fair return after such a long time, it is often necessary to have a valuation *de novo*, with its additional expense and delay. (Howell, *Recent Developments in the Application of the Rule of Smyth* v. *Ames in Valuation Proceedings in the Federal Courts*, 3 Tex. L. Rev. 412, 431 (1935).)

See also Goddard, *The Evolution and Devolution of Public Utility Law*, 32 Mich L. Rev. 577 (1934); Lilienthal, *Regulation of Public Utilities During the Depression*, 46 Harvard L. Rev. 745 (1933); Beutel, *Due Process in Valuation of Local Utilities*, 13 Minn. L. Rev. 409 (1929); Federal Trade Commission, *Summary Report to the Senate of the United States*, January 28, 1935, Senate Doc. 92, Pt. 73–A, 70th Cong., 1st Sess., p. 154.

The lengthiness of valuation proceedings is accompanied by great expense to both sides. The utilities are prompted to engage high-priced legal, engineering, and accounting talent, and the commission must follow suit in self-protection. And what is worse, the utilities pass these expenses on to the rate payers. The rate payers are thus forced

to bear the heavy financial burden of litigating against their own interest.

> * * * As the cost to the utility in prosecuting or defending a rate case is allowed as an operating expense, this cost is eventually paid by the consumers. Thus, there is an incentive to the utility to protract the proceedings as long as possible; because, win or lose, the cost must be absorbed in the rates, and the effective date of any reduction in rates is usually postponed. (Atwill, Henry C., *Weaknesses of the Valuation System,* American Academy of Political and Social Sciences Annals, Vol. 159 (January 1932) p. 96, 98.)

The Federal Trade Commission has likewise called attention to the injustice of the burden placed upon the rate payers:

> Now, the significance of rate litigation, a particularly expensive type of legal procedure because of the expert engineering and accounting testimony upon which it depends, is that the cost of maintaining it in behalf of the companies constitutes an allowable expense of operation and must, therefore, be a determinant in the fixing of any rate estimated to allow a fair return to the utility. Thus, the expense is saddled on the rate-paying public. Furthermore, the cost of maintaining commissions and courts before whom rate cases are tried is a direct charge upon the State's tax resources, again a burden on the public. Likewise, special counsel, where used in behalf of the State or commission, and the fees of any independent experts they may feel called upon to employ, to say nothing of the not inconsiderable item, in protracted rate cases, of stenography, printing,

and miscellaneous expense are all out of the public pocketbook. What the aggregate of such sums amounts to in any one year has probably never been computed; that it is enormous goes without saying. It is not unsafe to surmise, therefore, that whatever influence lawyers, engineers, and accountants with public-utility connections can bring to bear to preserve a system representing such a source of income to them, will continue to be brought. This is particularly true while, as at present, utility holding companies supply so many of such services and are dependent upon their continuance for much of the holding company's own revenue. (*Summary Report to the Senate of the United States*, January 28, 1935, *op. cit.*, p. 34, at p. 157.)

See also, Note, *Public Utilities—Rate Base—Late Supreme Court Decisions*, 34 Mich. L. Rev. 100, 107 (1935):

> * * * Professor Riggs, an engineer with wide experience in valuation cases, states,
>
> "The subject of revaluation of large properties has become a matter of grave concern to officers charged with the management of utilities. Valuation work accurately and carefully done, in sufficient detail to satisfy the requirements of attorneys conducting rate or other cases involving valuation, is costly and time-consuming. * * * To have expended from $50,000 to $500,000 for valuation of utility property within four or five years, and then to face a new valuation to meet the needs of a new case is a serious matter in the case of any company." This expense is passed on to the rate-payers in the form of an increased allowance for overheads, and an

equal expense to the Commission is likewise passed on to the public in the form of increased appropriations for valuation work—or through the failure to hold rate hearings."

The case of *Indianapolis Water Company* v. *McCardle,* 272 U. S. 400, provides a striking illustration of the expensiveness and delay of the proceedings. The facts of the case have been summarized as follows by Beutel, *Due Process in Valuation of Local Utilities,* 13 Minn. L. Rev. 409 (1929):

> The company was comparatively small. The court, dispensing with the services of a master, heard the evidence itself. The commission, the lower court, and the majority of the Supreme Court, were agreed that the theory of reproduction was to be taken as the determining factor of value, and that 7 percent was a reasonable rate of return on the value so determined. Within seven months of the beginning of these proceedings before the commission, the company and commission, after a complete investigation by the commission's engineers, had agreed upon a valuation of the entire property involved, for bond issue purposes. This result supported in detail the valuation for rate making purposes later made by the commission and questioned in this suit. All these facts tended to simplify the case. There was no necessity of projecting return or calculating fictitious costs of production. The only point at issue was the value of the property on the reproduction theory. Thus we have here an example of a valuation case reduced to its simplest possible element, the

determination of the pure fact of value by agreed methods (pp. 424–425).

* * * * *

An examination of the record and opinions discloses that over forty different estimates of the total value of the property were offered in evidence before the commission and the courts. These estimates ranged from $8,612,399, the actual cost of the property shown by the company's books, to $25,404,026, the value claimed by Mr. Hagenah, an expert witness for the company (p. 425).

* * * * *

The proceedings in this, the simplest of cases as rate fixing cases go, started on June 8, 1923, and three years and five months later on, November 22, 1926, the Supreme Court finally reversed the commission. The investigation to compile the the evidence and the hearing of the testimony in the various tribunals consumed over a year's effort by a combined staff of experts employed by the commission and the company. The briefs and record, in greatly abbreviated form, in the Supreme Court alone had reached a total of about 700 pages which fill a bound volume approximately three inches thick, when the court, to avoid further delay, fixed the valuation (pp. 425–426).

* * * * *

Now suppose the commission on the day the Supreme Court handed down that decision had fixed rates calculated to yield 7 percent on $19,000,000, would the rate stand without a redetermination of the value of the plant? The plain answer on the theory of the case must be, *No!* The valuation is fixed as of January 1924. The rate

> necessarily must be fixed as of November 1926. The company, if it desired, could question the rates immediately, and the inquiry would have to take place in 1927 (pp. 426–427).
>
> * * * * *
>
> The only "fact" of value conclusively established is "spot" value as of 1924; but the spot has moved while the judicial process ground on. The system approved in this case demands a new determination of value, so the commission, courts, and experts must get together once more and construct a new theoretical plant on the "spot" prices of 1927. The very magnitude of the task will again cause the result to be useless. Thus, on the theory of this case, no rate can ever be set which will bind the company (p. 427). (Beutel, *Due Process in Valuation of Local Utilities*, 13 Minn. L. Rev. 409 (1929).)

Former Chairman William Prendergast of the Public Service Commission of New York has stated that the appraisal made by the New York Telephone Company cost that Company in the neighborhood of $5,000,000 (*New York Commission on Revision of Public Service Commissions Law* (1930), Vol. I, 381). It is estimated that the task of determining the fair value of all utilities subject to the jurisdiction of the Public Service Commission of New York, even with the cooperation of the utility companies and the adoption of shortcut methods, would cost about $10,000,000 and require at least three years. (Minority Report, *New York, Commission on Revision of Public Service Commissions Law* (1930), Vol. I, 394).

The expenses involved in valuation projects for rate-making purposes have been graphically de-

scribed by Harry R. Booth, former General Counsel of the Illinois Commerce Commission:

> In connection with a case recently decided by the Illinois Commerce Commission, the Illinois Bell Telephone Company stated in its annual report that it had spent $1,200,000 in preparation of a state-wide appraisal, and this was subsequent to huge expenditures in the *Chicago Telephone* case. In proceedings before the same Commission involving the Commonwealth Edison Company of Chicago, the company's expenditures totaled approximately $1,000,000, a large part of which was for appraisals; and the People's Gas Light & Coke Company, also of Chicago, spent in excess of $750,000, more than $600,000 of which was for appraisal purposes. In Missouri, two recent cases involved expenditures, mostly for appraisal purposes, of over $900,000 by the Union Electric Company and nearly $300,000 by the Laclede Gas Light Company, including the Commission's expenses in both cases. * * *
>
> By some authorities it is stated that a complete reproduction cost appraisal may be expected to cost from one-half of a percent to one percent of the reproduction cost of the property in question. Hence, for the electric, gas and telephone companies alone, which are reported in *Moody's Manual of Public Utilities* for 1937 as having a property value of over $20,000,000,000, the cost of making reproduction cost appraisals might run from $100,000,000 to $200,000,000. * * *
>
> The costs incurred by utility companies for such valuations are ordinarily charged to operating expenses, with the result that they are, in effect, paid for by the consumers.

> Costs incurred by cities and public service commissions are ordinarily paid for out of taxes, which fact, of course, exerts a distinctly discouraging influence. (Booth, *Prudent Investment, Fair Value and Public Utility Regulation,* 1 Nat. Lawyers Guild Q. 229, 235 (1938).)

The burdens of present-day rate making have been so great that commissions have frequently abandoned the attempt to secure through normal channels of regulation reductions in rates to which consumers were entitled. The New York Commission has stated:

> Consumers have appreciated that it is better to secure a reduction in rates promptly, even though it may not be as large as should be made, in their opinion, and even though it may not be as large as might be ordered by the Commission after a rate case had been conducted, extending over months and perhaps years, and possibly to be litigated in the courts. * * * It may be pointed out also that practically the Commission can cover a wider territory and deal with many more cases by negotiation than it can through formal proceedings. The latter consume far more time of the Commission and its limited staff, with the result that where negotiations with ten companies may be concluded in a few months, it would require several years to make the inventories, appraisals, accounting reports, and engineering investigations which rate cases would require. (1931 *Annual Report, New York Public Service Commission,* Vol. I, p. 8.)

The desire on the part of the commissions to achieve expeditious rate reductions benefiting the

public, coupled with the realization that the "fair value" rule equips the utilities with the means of hamstringing that objective, has led some commissions to abandon their regulatory weapons for what has been called "negotiation and wheedling." See Spurr, *Has Utility Regulation Been Reduced to Negotiation and Wheedling?* Public Utilities Fortnight, Sept. 2, 1937, p. 259.

The regulatory agencies have tried to develop short-cut methods to equitable and effective rate regulation. Some, like New York, employ the "temporary rate" procedure (*Bronx Gas and Electric Co.* v. *Maltbie*, 271 N. Y. 364, 3 N. E. (2d) 512); others have adopted the "sliding-scale" arrangement (Roberts, *How the "Sliding Scale" Reduces Rates*, Public Utilities Fortnightly, July 2, 1936, p. 2). A special committee of the National Association of Railroad and Utilities Commissioners has studied the time and expense involved in the present "fair value" process and has made recommendations for shortening rate cases and reducing the costs. (1940 and 1941 Reports on the Committee on Rates of Public Utilities, National Association of Railroad and Utilities Commissioners, 52nd Annual Proceeding, pp. 325–331, 53rd Annual Proceeding, pp. 320–323, 435–437).

Additional authorities condemning the "fair value" doctrine for rate-making purposes are: Cabot, *Public Utility Rate Regulation*, 7 Harv. Bus. Rev. 257–266 (1926); Dorety, *The Function of Reproduction Cost in Public Utility Valuation and Rate Making*, 37 Harv. L. Rev. 173 (1923); Bauer and Gold, *Public Utility Valuation* (1934).

D. "REPRODUCTION COST" IGNORES THE COST OF REPRODUCING A SERVICE

Since it is the service rendered by the utility which is the *quid pro quo* for the rates paid to it by consumers, the theory of "reproduction cost" even if otherwise admissible would logically apply to the cost of reproducing a service, not the cost of building an identical plant:

> First, the only possible argument in favor of cost of reproduction springs from the analogous use of cost of reproduction in private competitive business. * * * But the cost of reproduction so far as utilized in establishing prices in private business is not the cost of reproducing the identical property but the cost of reproducing an equally serviceable property. Or, let us say; it is the cost of reproducing the article or service, or an equally useful article or service, and never the cost of reproducing a particular plant. In truth, invention and improvement work changes in all industrial operations so rapidly that it is difficult to find any plant a few years old which would be reproduced by competent engineers in the same form today. Therefore, to utilize the idea of cost of reproduction intelligently is not to utilize the cost of reproduction of any particular property but of a service or of an equally useful service. (Richberg, Donald R., *A Permanent Basis for Rate Regulation*, 31 Yale L. J. 263, 277 (1922).)

But while an accurate application of the theory calls for ascertainment of the cost of reproducing the service, such an ascertainment is in practice impossible:

> * * * It must be apparent that such a basis for rate making would open up a new

field for speculative estimating, to the increased profit of engineers and lawyers and to the increased confusion of the courts and commissions and would bring increasing instability to all public utility operations. (*Ibid.*)

The impossibility of applying reproduction cost as it should in theory be applied was observed by Robert H. Whitten as early as 1914:

> * * * The reproduction of the service involves not only the determination of the cost of the most efficient substitute plant, but the determination of the present cost of reproducing the business, the proper allowance under present conditions for interest and profit, and the operating costs for the substitute plant. In most cases it is exceedingly difficult and expensive to determine the design of an equally efficient substitute plant. In the case of a railroad, for example, the cost of determining a substitute location and of estimating the operating costs thereon would be so great as to render it entirely impractical as a factor in rate regulation. It would require a careful survey of various available locations, and estimates of construction and operating costs. The engineering costs of such survey and estimates would be enormous.
>
> The cost of reproduction in practice, therefore, instead of meaning the cost of a substitute plant of the most modern approved design, capable of performing the same service as the existing plant, has come to mean the cost of a substantially identical reproduction of the existing plant. This is the usual method. It involves, however, a partial abandonment of the reproduction of the service theory, and a somewhat imper-

> fect recognition of the fact that cost of production is necessarily related to the past as well as to the present and future. (Whitten, Robert H., *Fair Value For Rate Purposes,* 27 Harvard L. Rev. 419, 427 (1914).)

It goes without saying that if a plant were actually to be reproduced it would be designed in a way to take advantage of possible operating efficiencies. Thus, an entirely new plant which would produce at a capacity equivalent to that of existing facilities would normally be of a different design and higher operating efficiency. In the normal course of engineering development economies would be worked out and passed on to the consumer in the form of a reduced rate, resulting from a reduction in the valuation. The purely theoretical character of the concept of reproduction cost takes no account of these operating efficiencies:

> * * * In exchange-value economics the real value of a plant is not determined by the cost of reproducing the identical plant but by the cost of producing the commodity in a new plant having the most modern equipment required to reproduce the article. No one would be willing to invest in an obsolete plant if a new one could be built to be operated at much lower operating expenses per unit of product if such a plant could be built for the same cost as the obsolete one. It is the cost of building a modern plant of similar capacity that determines the value of a plant in an unregulated competitive industry, and not the cost of reproduction of a similar plant. Hence, reproduction cost does not cause the owners of a regulated enterprise to fare the same as the investors in unregulated competitive enterprises.

> There is, furthermore, a limitation to the concept that the cost of producing the commodity in a new plant regulates the value of an old plant, since, because of technological developments, the value of such a plant would scarcely, if ever, exceed the cost of reproduction and might be considerably less. Reproduction cost, therefore, is a measure of maximum value at best. Wilson, Herring, and Eustler, *op. cit.*, p. 24, at p. 126.

The same point is made by the minority members of the New York Commission on Revision of Public Service Commission Law, who stated:

> Even if one assumes that the *value of the property,* somehow conceived, is the proper basis of rate control, it by no means follows that cost of reproducing a substantially similar plant even roughly measures that value. This fact must be evident if we take the analogy of any unregulated business property, or of an ordinary commodity used for consumption. The value of a dwelling house, for example, is not measured by the cost of producing a replica unless it may be assumed that, were the existing house destroyed, its owner would find it expedient to build another one just like it. Even more striking is the difference between the value of the assets of a growing, progressive business enterprise and their cost of reproduction. These assets, to be sure, may still be in use, and giving what would be called good service; yet many of them are not giving as good service as could be produced by the most modern type of plant and equipment, constructed in the best possible location, and adapted to existing conditions of demand

and of industrial technique. An intelligent appraiser, to be sure, might estimate the replacement cost of these properties as a starting point, but in that case he would write down the reproduction costs ruthlessly, perhaps to a mere fraction of the cost new, as a recognition of the fact that obsolescence, inadequacy, and physical depreciation have greatly impaired their present worth. This, at least, would be the practice of an appraiser who wishes to secure an honest valuation rather than a bloated statement for purposes of "dressing" the balance sheet. (Minority Report, *New York Commission on Revision of Public Service Commissions Law* (1930), Vol. I, p. 345.)

Similarly Attwill writes:

> When we know that values are required by courts to be placed upon the property of a corporation which no one in the world would pay to acquire, except for the monopoly the utility enjoys through special privileges obtained from the public, and values which usually exceed the total of the market value of the outstanding stock plus its liabilities, we know there is something wrong in this system of valuation. Mr. Justice Stone has aptly described it as a "synthetic" value. Synthetic products are seldom as good as the real thing. (*Op. cit. supra*, p. 33, at p. 99.)

Another factor which reproduction-new should, but fails to, take into account is the strong likelihood that the new plant construction will produce at a lower unit cost by reason of its operating efficiencies. Such a reduction in the operating cost should in logic and fairness be passed on to the con-

sumers since they are in fact paying for a new plant; yet the reproduction-new formula permits the high operating cost of the old plant to be superimposed on the high reproduction cost of the new:

> Even if a new plant of equal capacity were to cost more to construct, it might produce at unit costs so much less than the old plant that the additional cost of construction would be an excellent investment. In such a case it would be unfair to require the consumer to pay rates that would yield enough to pay the high operating expenses of the old plant and produce a return equal to that which would be a fair return upon the greater cost of an up-to-date plant. Yet the courts have held in numerous valuation cases that the plant, the cost of reproduction of which is to be estimated, is a plant identical with that in existence and have declared that the cost of reproduction of the plant must be considered in valuation for rate-making purposes. (Wilson, Herring, and Eustler, *Public Utility Regulation*, 1938, p. 126.)

Perhaps the most serious consequence of the reproduction-cost theory, from the standpoint of the public, is the fact that it discourages the introduction of improvements in the technology of the utility, since it permits obsolete and outmoded equipment to be included in the rate base at its high replacement cost. In the words of Attwill, the theory is "an incentive to inefficiency":

> The system makes no provision for depreciation by reason of inadequacy or obsolescence due to the change in the art. Under this rule, what incentive is there for the company, once it has absorbed the lighting and power business in its area, to

> install up-to-date equipment? If it can obtain as great a return on the old as it can on the new equipment, there is little incentive, so far as the profits of the business are concerned, to install the new. (*Attwill, op. cit. supra,* p. 33, at p. 99.)

As stated by Beutel:

> It [reproduction cost], encourages the companies in using antiquated machinery and obsolete equipment because of the increase of rates which will result from the practice of including such machinery in the valuation at prices many times greater than its original cost or present value as productive equipment. Thus, in a recent case an obsolete pumping plant that cost less than two hundred thousand and could have been replaced with modern machinery for less than three hundred thousand, was allowed a "reproduction" value of over one million dollars. (Beutel, *op. cit. supra,* p. 39, at p. 433.)

E. REPRODUCTION COST UNFAIRLY ASSESSES THE PUBLIC FOR AN UNEARNED APPRECIATION IN THE UTILITY'S VALUE

The advocates of reproduction-cost in rate valuations have urged that this formula enables the investor to realize an appreciation in the value of the utility, just as other investors holding property over a period of years may become the beneficiaries of an unearned increment. The claim is both specious and unjust.

*1. "Costless items"*

The unearned increment enjoyed by the investor in nonutility property is commonly realized by sale, but the theoretical appreciation in the utility's value is not susceptible of such pragmatic measure-

ment. Instead, it becomes an excuse for the speculative evaluation of many "costless" items:

> * * * Under the principles of valuation as hitherto established and administered by courts and commissions, "fair value" has become a means of justifying and legalizing almost every type of unearned increment, tangible and intangible, which accrues to unregulated monopoly. By the inclusion of such costless values as going value, water right values, easement values, and by the failure to make anything like complete deductions for accrued depreciation and obsolescence, companies are able to establish "values for rate-making purposes" so large that even the most prosperous and profitable enterprises make the false appearance of earning only a very limited rate of return. (Minority Report, New York Commission on Revision of Public Service Commissions' Law (1930), Vol. I, p. 251).

A literal compliance with the reproduction-cost principle indeed permits the utility to reap the profits of every type of unearned increment which accrues to monopolistic or semimonopolistic enterprises. See Report of Federal Trade Commission to the Senate of the United States on Public Utility Corporations, January 28, 1935. S. Doc. 92, Part 73A, 70th Cong., 1st Sess. The huge profits—and losses—which can be spun from the shifting of general price levels, under the delusive theory of reproduction-cost, may be gathered from the absurd results produced in the *St. Louis & O'Fallon Ry.* case. In that case the Interstate Commerce Commission demonstrated that if reproduction cost estimates were applied to all railroad property to-

talling 18 billion dollars in 1919, the "value" would have jumped to over 41 billions in 1920, only a year later. The burden on the rate payers would have increased, upon that theory, by 23 billion dollars without the investment of a single dollar by the owners. *Excess Income of St. Louis & O'Fallon Ry. Co.*, 124 I. C. C. 3, 31–32; *St. Louis & O'Fallon R. Co. v. United States*, 279 U. S. 461, 498, Brandeis, Holmes, Stone, J. J., dissenting.

*2. Unfairness to public and utilities*

The possibility of such huge speculative changes under the reproduction-cost formula can be productive of great injustice both to the public and to the utility. For under this theory, there is applied to the *reproduction* value (which includes unearned appreciation) the rate of return made on *investment* in other business undertakings of corresponding risk and uncertainty. Consequently, during periods of high price levels the rates tend to be high, placing the hardship on the consumers. Conversely, when low prices prevail, a low rate would be applied, theoretically at least, to a low base, causing hardship to the companies. If this principle were strictly adhered to in depression periods, severe and, perhaps, disastrous consequences to the utilities would inevitably ensue.

*3. Public pays for increased values which it alone caused.*

The inclusion of reproduction-cost in a rate valuation penalizes the consumer by transferring to the utility valuation the appreciation in property and equipment which is generally attributable to the efforts of the community at large, including the consumers of the utility service.

> Since the increase in value due to unearned appreciation is a creation of the community, it is manifestly unjust to require the rate-paying public to bear an enhanced burden by reason of an increment which it has created. Richberg, *A Permanent Basis for Rate Regulations,* 31 Yale L. J. 263 (1922).

Mr. Justice Black has exposed the inequity in reproduction-cost estimates:

> It is difficult to believe that such concepts of property can establish clear proof that the Constitution of the United States has been violated. Nor do I believe that, even if the people of Indianapolis and the surrounding community have permitted the Water Company to use this stream for a public service, there has been a grant of a prescriptive property right which can be capitalized by the Company, in order to exact higher water rates from the very people who granted the privilege. (*McCart v. Indianapolis Water Co.,* 302 U. S. 419, 433, Black, J., dissenting.)

A similar point has thus been stated:

> The most common argument against the use of the original-cost method of valuing public utility properties, aside from the difficulties alleged to be encountered in securing records of such costs, is that appreciations in value of property (if such exist) are denied to the owners thereof. The reproductionists, however, do not point to any rule of common equity which entitles them first to earn an adequate return on their investments and then to participate in the profits which accrue to appreciation; but they rely on certain judicial passages, which in themselves are sound, although subject to linguistic abuses when applied unadvisedly to valuations that are made

bases for rate schedules. (McCann, W. R., American Society of Civil Engineers, *op. cit.*, p. 6, at p. 1618.)

The use of a reproduction-cost basis thus enables a utility to increase the charges to the community by reason of values contributed primarily by the community. Current practice with regard to depreciation reserves provides another device for accomplishing the same result:

> * * * * It [the reproduction cost method] includes the depreciation reserve as a basis of the return, because as a practical matter it is invested in the plant. This naturally arouses hostility upon the part of the consumer. He is asked to build up an insurance fund to protect the integrity of the stockholders' investment, and then is required to pay a return upon that insurance fund in rates. This necessarily arrays the stockholders and the consumers in hostile camps, with the result that the consumer vigorously assails the provisions for depreciation. This causes vigorous assaults to be made upon the allowances for depreciation in rate controversies, with the result that public authorities are likely to allow too little for depreciation. This must be made up by larger expenditures for maintenance, or the capital of the company will eventually become impaired * * *. (Attwill, *op. cit.*, p. 33, at pp. 98–99.)

F. SOUND BUSINESS JUDGMENT FREQUENTLY DICTATES RATES WELL BELOW THE LEVEL REQUIRED BY THE "FAIR VALUE" STANDARD

The "fair value" method of rate-making has led to conclusions demonstrably unsupportable in the face of actual experience. The "fair value" of a

utility's property may be much greater than the actual cost of that property and if, under such circumstances, rates are fixed which fail to yield a "fair return" on this "fair value," those rates must be condemned as confiscatory under the doctrine of *Smyth* v. *Ames*. This would seem to be true no matter how successfully the Company may be able to operate under them, or how liberal the dividends it can pay, or how good the company's credit may be, or what return such rates may afford the Company on its investment prudently made in properties used or useful in the public service. Thus, confiscatory rates under the "fair value" test may enable a utility to operate with outstanding success because confiscation is determined by a method which has no relation to the object sought to be attained. The glaring incongruity between theoretical "fair value" and the actual facts of experience was well illustrated by *Lindheimer* v. *Illinois Bell Telephone Company*, 292 U. S. 151, in which this Court found the theory pursued irreconcilable with the actualities of operation.

No more fatal indictment can be presented against the "fair value" doctrine than that which is offered by the spectacle of successful and prosperous public utilities revealing themselves as the victims of constitutional confiscation upon the criterion of the "fair value" rule. See the dissenting opinion of Mr. Justice Black in *McCart* v. *Indianapolis Water Co.*, 302 U. S. 419, 435. When public utilities find it expedient, as they frequently do, to charge rates lower than those to which they are constitutionally entitled under the doctrine of *Smyth* v. *Ames*, they reveal the true character of the fair-value method of rate making.

Thus, it is found that utilities as a rule do not actually charge a return based upon reproduction cost:

> Chairman Cortelyou of the Consolidated Gas System, Vice President Nickerson in charge of its finances and accounts, and President Sloan of the New York Edison Company and the other electrical properties, all testified that the rates in effect were not yielding the return on the present value of the properties to which they were entitled under Federal Court decisions. In most cases they testified, the rates were not providing a fair rate of return even on actual investment. They said, however, that these rates were good business, i. e., dictated by "good business judgment," that they were in general adequate to enable the companies to obtain all the new capital required to properly service the communities, and they admitted further that the companies were able to pay good dividends on their common stock.
>
> Such testimony exposes the absurdity of the whole valuation claim which has gone so far to wreck public utility regulation. The companies are expending great sums of money and are making extreme efforts to secure rulings from the Courts to the effect that rates dictated by good business judgment and adequate to secure new capital are confiscatory under the 14th amendment to the federal constitution. Unquestionably such admissions show that the valuations of these properties could safely be reduced not only below the elaborate figures for present value built up by the engineering and accounting forces of the corporation but also below the actual investment figures on the books of the corporations. (*New York*

*Commission on Revision of Public Service Commissions Law,* Minority Report (1930) 271.)

6. SOUND UTILITY FINANCING DOES NOT NEED A FAIR-VALUE RATE BASE

There is a sharp conflict of opinion as to the respective effects of the rival valuation theories upon the market for utility securities. Passing, for the moment, the merits of the controversy, it is evident that the prevailing uncertainty as to the proper method of rate determination must have an adverse effect. This was pointed out by Robert H. Whitten:

> Investors in putting their money into public utility enterprises are entitled to know whether, in case the utility is appropriately located and normally successful, it will be permitted to earn a return on the actual and necessary investment, or upon the cost of reproduction, or upon the market or exchange value of the property, or upon a combination of these or other factors. Any arrangement might conceivably be fair to the company and fair to the public provided it were known in advance, so that reciprocal relations between risks involved and returns secured might be established, and proper methods of accounting for depreciation and appreciation instituted. For the future at least it is clearly essential that some one standard should be adopted as the normal and controlling standard in determining fair value. As to the past, the situation, while more complicated, still points to the desirability of definitely choosing some standard. (Whitten, Robert H., *Fair Value For Rate Purposes,* 27 Harv. L. Rev. 419, 420 (1914).)

The argument in favor of reproduction cost runs largely in terms of realization of unearned increment and stability of the investor's real income. These questions have been discussed above. For present purposes it will be sufficient to quote the following passage from the Federal Trade Commission's report:

> Nevertheless it is said that reproduction cost (which necessarily reflects price changes) is essential to attract capital in a competitive market at minimum rates of interest, since it is necessary to permit utility investors to take advantage of unearned increment in land and other values, in order to induce capital to flow into a regulated enterprise rather than into competitive industries. The argument is that as long as other fields of investment are permitted to hold out the lure of possible unearned increment, utilities must be free to hold out the same lure. Bonbright has pointed out, however, that investors overwhelmingly prefer security of income to opportunity for speculative gains coupled with risk of corresponding loss, as abundantly indicated by the preference of investors for bonds and other fixed interest-bearing securities rather than for common stocks. It is further indicated by the ability of the United States Government to market its bonds at rates considerably below the prevailing rates of interest without the inducement of any speculative gain. Federal Trade Commission, Report to the Senate of the United States, January 28, 1935, *op. cit., supra*, p. 34, at p. 155.

Similarly,

> It is a fair assumption that, in general, investors in establishing public utilities have

> looked to a fair return on their actual investment to compensate them for their outlay, and have not taken seriously into account any appreciation or depreciation in the value of land or in the price of labor and materials entering into the reproduction cost of structures and equipment. They have necessarily assumed that they would be able and would be permitted to receive for their service an amount equal to their actual cost of production, *i. e.*, operating expenses, depreciation, and interest and profits on their actual capital outlay. (Whitten, *op. cit., supra*, p. 56, at p. 425.)

To the same effect see Bonbright, James C., *Merits of Original Cost and Reproduction Cost*, 41 Harvard L. Rev. 593 (1928); Hale, *op. cit., supra*, p. 13, at p. 971.

A fluctuating rate of return may, indeed, attract a certain class of capital. But capital so attracted is of dubious usefulness. It represents speculative purchases of equities, a form of "investment" that the utilities and the public might well do without.

> The normal actual capital cost as a basis for rate determination, moreover, has a distinct advantage from the standpoint of public policy. It is desirable that rate schedules should have stability and should not fluctuate with the price of iron pipe or copper wire or with real-estate activity or reactions. A utility is not established for the purpose of speculating in copper wire or iron pipe or land. It must, however, in furnishing its service invest its money permanently in these things. The utility should not be expected to assume the risks of fluctuations in the price of the land and materials it uses (Whitten, *op. cit., supra*, p. 56, at p. 426).

Indeed, the speculative character of reproduction value rates is a source of serious dangers to the utilities themselves. Writing in 1921, a commentator called attention to the probable effects of a prolonged decline in prices:

> * * * it should be pointed out that we are at present quite obviously entering upon a period of declining prices and that in determining a rate base any use of figures representing the cost to reproduce the identical property will deprive public utilities in the near future of any return upon millions of dollars of actual investments which have been made in the last few years in properties which may be reproduced in the years soon to come for less than the amount of the investments which they represent. In such a time it will seem as unfair to the investor that his investment should be scaled down and that the return on his capital should be diminished because of declining price levels as it has seemed unfair to the consumer that the investor's capital should be inflated and his return increased because of rising price levels. (Richberg, Donald R., *A Permanent Basis for Rate Regulation,* 31 Yale L. J. 263, 278 (1921).)

Likewise, Bauer comments:

> The second general objection to reproduction cost is its failure to provide for proper standards of financial stability in the industries affected by regulation. It would promote speculation during one period and produce financial disintegration during another. It would, in turn, attract unnecessary capital and then retard the desirable flow.
>
> The fact is usually overlooked that by far the greater proportion of the actual investment in public utility properties has

> been made through bond and preferred stock. A reasonable estimate is that at least 75% of the cash capital was furnished by these securities, and only 25% or less by common stock. In many instances the proportion of common-stock investment is even less, and there are important cases where all the money put into the property is represented by limited return securities.
>
> Because of such normal financial structure, with the large percentage of fixed-return capital, any change in the return on the investment has a cumulative effect upon the common stock. (Bauer, *op. cit. supra*, p. 18, at p. 419.)

A fluctuating rate of return deprives conservative investors of stability, on the one hand; and it tends to imperil the financial soundness of the utility on the other hand. But the evil potentialities of the variable rate base are by no means exhausted. Much of the financial manipulation which discredits the management of utilities is directly traceable to the use of the reproduction cost base. "Undoubtedly, the stakes are high for those who control utilities through very narrow equities, offering great opportunity for speculative gain." Frankfurter, *The Public and Its Government* (1930), at p. 106.

> The doctrine of fanciful valuation has greatly encouraged recent tendencies in financial organization. In turn, the elaborate and mysterious refinements of intercorporate relations have powerfully sustained the efforts by which lawyers and engineers have built up schemes for inflated values. The search for fictitious value—at best a game of blindman's buff—is thus greatly complicated by the intricacies of elaborate

corporate arrangements within utility enterprises. Not only is there the excitement of a game fascinating to technicians in law and engineering, but in applying the prevalent judicial doctrines of utility valuation by manipulating intercorporate relations, there are the cruder but more solid temptations of buttressing unreasonable rates by law and securing huge profits through speculative utility holdings. (Frankfurter, *op. cit.*, at pp. 107–108.)

H. REPRODUCTION-COST HAS BEEN CONDEMNED BY THE GREAT MAJORITY OF REGULATORY COMMISSIONS.

A number of commissions have taken a very positive stand with respect to the controvery as to the merits of reproduction-cost versus prudent investment. Likewise, there are a number of judicial opinions which have pointed out the evils of the reproduction-cost system and protested against its continuation.

Perhaps the best exposition of the prevailing attitude of those who have been in direct contact with this problem is contained in the Minority Report of the Commission on Revision of Public Service Commissions Law of New York. The report states:

> In our opinion the greatest single weakness of the existing system of public utility regulation—and this applies not merely to New York State but to the country as a whole—lies in the hopeless difficulties inherent in the use of a physical valuation of property as the basis of rate control. Unless and until this fatal defect in regulating theory has been overcome, any attempt to revise the Public Service Law must fail to reach the root of the trouble. To a very

> large degree the other weaknesses which have been disclosed in the New York regulatory system, such as the understaffing of the Commission, the tendency of the Commission to become a purely judicial as distinct from a regulating body, and even the evils resulting from the unrestricted financial operations of holding companies are a repercussion from this more fundamental obstacle to effective control. We believe that we share this view with the great majority of impartial students of the problem and that the existing system would find almost no defenders were it not for the support which it derives from those utility companies which believe that its maintenance is in their pecuniary self-interest. (Commission on Revision of Public Service Commissions Law, New York, Minority Report (1930), p. 334.)

It has been the considered judgment of the great majority of the regulatory commissions that the use of reproduction cost is not a proper factor in the determination of a valuation. Indeed it is apparent that except insofar as the courts have compelled them to do otherwise, the commissions have tended to decline to apply the reproduction cost rule. In order to bring out the extent to which the commissions have adopted this position, we have conducted an extensive examination of the rulings of the commissions. Below are listed a selection of decisions in which it has been held that reproduction cost should not be a controlling factor:

> *Danbury* v. *Danbury & Bethel Gas & Electric Light Co.*, P. U. R. 1921D, 193, 206.
> *Re Potomac Edison Co.*, P. U. R. 1933B, 6.

*Grafton County Electric Light & Power Co.*, P. U. R. 1916E, 879, 885–888.

*Northampton Gas Petition*, P. U. R. 1915A, 618, 626.

*Bay State Rate Case*, P. U. R. 1916F, 221, 223.

*Middlesex & Boston Rate Case*, 2nd Ann. Rep., Massachusetts, Public Service Commission, Vol. I, pp. 105–112 (1914).

*Public Service Commission* v. *Washington Power, Light & Water Co.*, 7 Ann. Report, Public Service Commission of Washington, 130 (1917).

*Re York County Water Co.*, P. U. R. 1921A, 439.

*Iroquois Natural Gas Co.*, P. U. R. 1919D, 76.

*In re Tarkio Electric & Water Co.*, 12 Mo. P. S. C. R. 260 (1922).

*Re Northern States Power Co.*, 15 P. U. R. (N. S.) 126.

*Re Platte County Independent Telephone Co.*, P. U. R. 1922D, 303.

*Re Roanoke Water Works Co.*, P. U. R. 1920C, 745.

*Re Georgia R. & Power Co.*, P. U. R. 1921A, 165.

*Re So. California Telephone Co.*, P. U. R. 1922C, 97.

*Re Exeter Water Works*, P. U. R., 1923B, 339.

*Re Cole*, P. U. R. 1921C, 385.

*Marinette* v. *City Water Co.*, 9 P. U. R. (N. S.) 308 (1934).

*Milwaukee El. R. & Light Co.* v. *Milwaukee*, P. U. R. 1918E, 1.

*Grand Forks* v. *Red River Power Co.*, 8 P. U. R. (N. S.) 225.

*Pacific T. & T. Co.* v. *Thomas*, 13 P. U. R. (N. S.) 337.

Federal Commission cases:

*San Pedro, Los Angeles & Salt Lake R. R. Co.*, 75 I. C. C. 463, 523–567 (Eastman, Commissioner, dissenting).

*Excess Income of St. Louis & O'Fallon Ry. Co.*, 124 I. C. C. 3, 28–31, 36–37 (See also Eastman), Commissioner, concurring at pages 51–53).

*Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1.

*Re Safe Harbor Water Power Corp.*, 34 P. U. R. (N. S.) 236.

*Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263.

*Re Canadian River Gas Co.*, 43 P. U. R. (N. S.) 205.

*Detroit* v. *Panhandle Eastern Pipe Line Co.*, 45 P. U. R. (N. S.) 203.

*Re American Airlines, Inc.*, Docket Nos. 334, 204, Civil Aeronautics Board (Nov. 12, 1942).

A number of regulatory commissions have gone further than to condemn the use of reproduction cost as a basis for the valuation of public utilities. They have held that the prudent investment valuation of a utility is the factor that should control in the making of the rate. It must be noted that the commissions to a large extent have been forced to adopt a different theory because of the prevailing view as to the propriety of the use of reproduction cost. It seems highly probable that if reproduction cost were not forced upon the commissions by the courts, there would be wide agreement as to the merits of the prudent investment method. The following are some of the cases in which the commissions have not only rejected reproduction

cost as the basis, but have affirmatively adopted the prudent investment theory:

*Public Service Commission* v. *Pacific Telephone & Telegraph Co.*, P. U. R. 1916D 947, 955.

*Butler* v. *Lewiston A & W Street Ry. Co.*, P. U. R. 1916D, 25.

*Public Service Commission of Washington* v. *Spokane Falls Gas Light Co.*, P. U. R. 1921C, 523.

*Carlson* v. *Jamestown Telephone Co.*, P. U. R. 1920F, 645.

*Poughkeepsie & W. Falls R. Co.*, 1st Ann. Rep., New York Public Service Commission, Vol. I, p. 255 (1921).

*Cavanaugh* v. *Whitefish Municipal Water Utility*, P. U. R. 1922E, 198.

*Morris* v. *N. W. Bell Telephone Co.*, P. U R. 1922D, 769.

*Re So. Ill. Light & Power Co.*, P. U. R. 1919D, 489.

*Re Pacific Gas & Electric Co.*, 1 P. U. R. (N. S.) 1.

*Re Coast Valleys G. & E. Co.*, P. U. R. 1924C, 40.

*Re San Joaquin Light & Power Corp.*, P. U. R. 1922D, 595.

*Re Fresno Traction Co.*, P. U. R. 1925C, 566.

*Department of Public Service* v. *Grays Harbor Railway & Light Co.*, 12 P. U. R. (N. S.) 178, 200.

*Re Michigan Bell Telephone Co.*, 10 P. U. R. (N. S.) 149.

*Re Sea Cliff & G. C. Gas Co.*, P. U. R. 1921A, 211.

*Re Boise Artesian Water Co.*, 11 Ann. Rep. Idaho Public Utilities Commission 155 (1923).

*Barth V. Hughes & D. Electric Co.*, P. U. R. 1922A, 740.
*Re Midwest Power Co.*, P. U. R. 1922E, 22.

The general opinion of regulatory authorities who have passed upon the question of the proper valuation base is overwhelmingly in favor of the prudent investment as opposed to the reproduction cost method. Mr. Justice Brandeis in his concurrence in *Southwestern Bell Telephone Co.* v. *Public Service Commission*, 262 U. S. 276, pointed out that the Public Utility Reports for the years 1920 to 1923, inclusive, contain 363 cases passing upon the method of determining rate base. In 63 of these cases, reproduction cost was severely criticized or expressly repudiated. In 5 cases, reproduction cost was applied. In almost the entire remainder, reproduction-cost was either ignored or given only slight weight.

The objection to reproduction cost has been expressed as follows by a commission:

> This method (reproduction at prices prevailing at time of valuation) of determining value * * * is based upon prophecy instead of reality, and depends so much upon half-truths that it bears only a remote resemblance to facts, and rises at best, only to the plane of a dignified guess. *Danbury* v. *Danbury & Bethel Gas & Electric Light Co.* (Connecticut Public Utilities Commission, P. U. R. 1921D, 193, 206.)

This Court itself has found it an extremely difficult task to reconcile the reproduction cost method with the world of reality. Even as early as 1912, the Court expressed some doubt as to the exactness of this method. Speaking for the Court, Mr. Justice Holmes said, "Every figure that we

have set down with delusive exactness" is "speculative." *City of Louisville* v. *Cumberland Telephone and Telegraph Co.*, 225 U. S. 430, 432 (1911).

Concurring in the *Southwestern Telephone Company* case (262 U. S. at 290), Mr. Justice Brandeis said:

> The so-called rule of *Smyth* v. *Ames* is, in my opinion, legally and economically unsound. The thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise. Upon the capital so invested the federal Constitution guarantees to the utility the opportunity to earn a fair return. * * *

The Justice repeated this objection to *Smyth* v. *Ames* in his concurring opinion in *St. Joseph Stockyards Co.* v. *United States*, 298 U. S. 38.

### II. THE RULE OF PRUDENT INVESTMENT

Prudent investment as an equitable and practicable rate base has been recommended by economists, jurists, and progressive regulatory commissions. Informed opinion overwhelmingly supports the use of the investment rate base.

#### A. ADVANTAGES OF A STABLE RATE BASE

Prudent investment affords a stable rate base and simplifies rate regulation with all its accompanying advantages to investors and consumers. These have been summarized in the opinion of Mr. Justice Brandeis, concurring in the *Southwestern Bell Telephone* case, 262 U. S. 276, 289, 306:

> The adoption of the amount prudently invested as the rate base and the amount of the capital charge as the measure of the rate

> of return would give definiteness to these two factors involved in rate controversies which are now shifting and treacherous, and which render the proceedings peculiarly burdensome and largely futile. Such measures offer a basis for decision which is certain and stable. The rate base would be ascertained as a fact, not determined as matter of opinion. It would not fluctuate with the market price of labor, or materials, or money. It would not change with hard times or shifting populations. It would not be distorted by the fickle and varying judgments of appraisers, commissions, or courts. It would, when once made in respect to any utility, be fixed, for all time, subject only to increases to represent additions to plant, after allowance for the depreciation included in the annual operating charges. The wild uncertainties of the present method of fixing the rate base under the so-called rule of *Smyth* v. *Ames* would be avoided; and likewise the fluctuations which introduce into the enterprise unnecessary elements of speculation, create useless expense, and impose upon the public a heavy, unnecessary burden.

The advantages of a stable rate base from the standpoint of investors in the enterprise were thus emphasized by a committee of the Investment Bankers Association:

> So nearly as possible, a stabilized basis of property valuation should be developed. This is easier said than done, but candid effort can surely remove some of the chief causes of instabilities that are dependent on variations in commodity price levels and in varying rates of depreciation and obsolescence. Present deflation of values but emphasizes the disturbing effect of too fluc-

> tuating bases of value. To arrive at what is fair will call for mutual concessions—from public regulatory bodies, of preconceived notions that often have reflected political expediency rather than economic and basic considerations; from private ownership, of other preconceived ideas of the rights of private property in a regulated business imbued with a public responsibility and trust. Preconceived notions need to be reappraised or set aside, in favor of the answer to be found only after an unbiased solution that will more nearly represent public and private rights than any yet applied. This Committee cannot but believe that a sound economic solution will sooner or later receive judicial sanction. (*Commercial and Financial Chronicle,* November 21, 1931, Vol. 133, pt. 2, p. 3389.)

Since the early obstacles to the adoption of prudent investment have in the course of time been largely removed by the development of plant cost records and uniform systems of accounts, that standard may now be adopted because it is best suited to the requirements of regulation. Accounting and security issues of utilities have been controlled for many years. Prudent investment better assures the maintenance of equitable relations between public utilities and their customers by means of greater administrative efficiency, and at the same time promotes good service and attracts required capital.

This efficiency would come about by the narrowing of the field of controvery in rate-base matters, by shortening rate case proceedings and by reducing their cost. The quickening of the process would make more frequent review of rates pos-

sible and rate control would be converted from a spasmodic undertaking into a relatively simple, continuous and effective operation. Regulatory agencies have sought relief from the frustration accompanying the "fair value" theory by such procedures as "temporary rates," and "sliding scale rates." Moreover, public utility managerial attention would be freed of the burden which prolonged rate litigation presently involves, and a reduction in the present unwarranted cost of rate litigation and regulation would benefit the consumers and taxpayers who bear all such costs.

The prudent investment method tends better to regulate return according to the needs of a public utility as measured by its contractual interest on outstanding bonds, stipulated dividends on its preferred stock, and the return on common stock required to attract capital.[4] Most utility investors expect a limited return on an unchanging base. Bauer, *Effective Regulation of Public Utilities*, 120–126. The rate base under that method would be more closely related to those outstanding securities issued for value and the method would hold radiant prospects of a relatively stable rate. The speculative features of a high rate on high values in good times, and low rates on low values in bad times would vanish.[5] In that event, money

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[4] Even if it be assumed that economic conditions should be reflected in the rates fixed, this may readily be accomplished by altering the flexible rate of return. See Whitten, *Fair Value for Rate Purposes*, 27 Harv. L. Rev. 419, 434–5; Richberg *A Permanent Basis for Rate Regulation*, 31 Yale L. J. 263, 273; *Div. of P. U.* v. *Narragansett Electric Co.*, 27 P. U. R. (N. S.) 106, 109.

[5] As we have observed above, if commissions adhered strictly to the present value theory in times of depression and

should be even easier in the regulatory field than it is now, for the investor is much more interested in a fairly certain return than he is in a return that fluctuates from year to year.

From the consumers' point of view, it may be pointed out that a reasonably stable rate base likewise has its advantages. It means reasonably stable rates which allow him to budget more accurately for future utility services with the assurance that future rates will not be radically different from present rates. Also, reasonably low rates invariably stimulate consumption of the utility service, thereby increasing revenues for the benefit of investors.

In expanding utilities, prudent investment is obviously responsive to changing construction costs. If the net investment is expanding 5% annually, and the average service life of the property is ten years, 77% of the prudent investment rate base would reflect construction costs of the five most recent years. Even in utilities where the net investment is fairly constant, due to retirement of property offsetting additions, the prudent investment basis would reflect prices of the five most recent years for 72.7% of the property. Bernstein, *Public Utility Rate Making and the Price Level* (1937) 123–124.

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low prices for material and labor, the adopted rate base might be so low that the prescribed rates would drag financial distress in their wake. The public, however, has a definite interest in preventing financial distress which will impair efficient service. Bonbright, *Merits of Original Cost and Reproduction Cost*, 41 Harv. L. Rev. 593, 621–622; see Whitten, *Fair Value for Rate Purposes*, 27 Harv. L. Rev. 419, 423–424.

When rates are fixed for public utilities, they are designed to provide the annual compensation necessary to cover all current operating expenses (including wages and depreciation), current taxes and a fair rate of return on the rate base. Under the prudent investment method, therefore, all of the factors in rate-making reflect the current requirements of the utility, except the rate base which is partially current. However, it is not unreasonable to fix rates on prudent investment because such a method assures that the utility will receive a return *on* the investment (a 6½% profit above all expenses and taxes in the instant case) and a return *of* investment (through revenues to cover annual depreciation expense for property investment consumed in rendering service). If "fair value" be the description of the rate base, then prudent investment qualifies as the fairest and truest measure of value for rate-making.

The prudent investment basis promises the achievement of a sound plan for the control of utility rates. Its merits may be summarized thus: (1) the protection of the investors' interests with the corresponding encouragement to investment; and (2) the protection of the consumers' interests with the administrative simplicity of a practicable standard and the promotion of financial soundness for the maintenance of efficient service.

The prudent investment method, with its stable foundation upon facts rather than fiction, has been supported by many persons who have devoted themselves to the study of public utility regulation. The following are typical opinions:

> Since public utilities render a service which must be supplied continuously they

should be regulated upon a theory that they are or will become going concerns. They are secured in their market position by means of governmental grants which are either expressly monopolistic or tend to become such under the pressure of uneconomic competition. They have voluntarily invested their capital upon the implied assurance that they will be permitted to earn reasonable returns. Under modern conditions of regulation the investment of capital may even be compelled by governmental authorities or it is at least invested subject to governmental authorization and approval. Under these conditions of regulated monopoly, the true economic standard for determining the rate-base is the investment standard. (Glaeser, *Outlines of Public Utility Economics* (1931), p. 505.)

Our conclusion is that original cost (unimpaired investment or prudent investment) is the most satisfactory basis of valuation. (Jones, Eliot, and Bigham, *Principles of Public Utilities* (1931), pp. 239–240.)

The most widely accepted alternative to reproduction costs new is the prudent investment method of fixing fair value. * * *

* * * A stable rate base is a condition *sine qua non* of a satisfactory scheme of regulation. Prudent investment meets this condition, as does no other rate base that has been proposed. (Mosher and Crawford, *Public Utility Regulation* (1933), pp. 214, 216.

It is to be hoped that the Supreme Court will uphold the prudent investment principle and will set aside the concept of "present value" which for nearly 40 years has done much to render rate regulation ineffective. Prudent investment is a fixed,

> nonfluctuating rate base, fair to all parties concerned. It can readily be ascertained and can be kept current merely through accounting procedure. Adjustments because of changes in price levels can be made, as they should be, in the rate of return. (Wilson, Herring and Eutsler, *Public Utility Regulation* (1938) p. 152.)

Barnes considers that prudent investment affords a practical opportunity for effective regulation:

> The early obstacles to the adoption of a cost or investment standard of rate control have now been largely removed. With the extensive development of accounting control since 1908 and the more recent enlargement of commission control over security issues, the adoption of the prudent investment program would be quite practicable; the essential data are all available. In recognition of the present practicability of the prudent-investment standard, there are many decisions of the state commissions which indicate their preference for this simpler and more direct rate-making procedure. Even in those states where the adoption of the prudent-investment method of rate control is not immediately feasible, there is every reason to believe that the adoption of this standard would lead shortly to the development of the data required to make regulation on this basis truly effective. (Barnes, *The Economics of Public Utility Regulation* (1942) p. 574.)

Professor Bernstein of the University of North Carolina, an economist, has thus supported prudent investment:

> The need to simplify rate-making procedure, particularly in the determination of

fair value, must not lead to a neglect of other equally important considerations in choosing a new method of rate making. No rate-making plan can be satisfactory in the long run unless it protects the legitimate interests of the community; the interest of the investors in utility securities and of the consumers of utility services. It is necessary, therefore, that the new rate-making plan should assure to utility companies a net income that will attract the capital required for continued expansion of the utility industries. Rate making under the new plan should also be sufficiently responsive to changing economic conditions to prevent an undesirable divergence of utility rates from the costs of producing utility services.

The prudent investment method of valuation meets these tests in every respect. It is simple and definite, so that it facilitates administrative control of utility rates; and at the same time it assures to utility companies protection of their capital investment undertaken for the public convenience at the order of the rate making authority. There can be no greater stimulus to the economical provision of adequate utility capital than the assurance of the utilities commission that the investment, if prudently made, will be protected against the hazards of fortuitous price changes. At the same time, the continued retirement, replacement, and expansion of utility equipment would give considerable weight to the prices of recent years in a prudent investment valuation. Thus, the prudent investment method of determining fair value would induce continued provision of capital for utility enterprises, while maintaining a responsiveness of utility rates to changing

costs of producing utility services. (Bernstein, *Public Utility Rate Making and the Price Level,* (1937) p. 129.)

The following analysis by Bauer and Gold, well-known authorities in this field, reaches a similar conclusion:

> Standards for Proper Rate Base
>
> We shall consider particularly how "reproduction cost" or "fair value" as against "prudent investment" or "fixed rate base" would suit the purposes of effective control. The following standards are offered for the adoption of a desirable rate base and the consequent determination of return to the utilities.
>
> 1. The rate base, with the entire method of determining the return, must be capable of systematic administration.
>
> 2. It must provide for definite protection of both investors and consumers.
>
> 3. It must maintain the financial stability of the companies to the extent possible through rate control.
>
> 4. It must make available new capital as needed for public service, but prevent dislocation or distortion of capital additions.
>
> 5. It should encourage progressive development in the industries and service to the public.
>
> 6. It should provide rate flexibility for development purposes and permit accumulation of reserves in prosperous years for stabilization of rates and return when earnings decline.
>
> These standards of a rate base and method of determining return are obviously necessary for effective regulation. They are axiomatic and therefore need not be supported by analysis and demonstra-

tion. If utilities are to be regulated at all, the methods adopted should at least comply with these six standards. * * *

## Varying Versus Fixed Rate Base

The pivot of inquiry and analysis will be throughout as to whether the traditional "fair value" or a fixed rate base, or possibly some other basis, conforms the more satisfactorily to the standards presented. The point of view will be that of desirable policy considered as progressive public interest. It will include not only consumers but also investors, and more particularly collective needs and advantages of community and state.

At the outset, we may state that reproduction cost or "fair value" fails to conform satisfactorily to the first three requirements which together are involved in comprehensive administration * * * We shall show that a fixer rate base, subject to systematic engineering and accounting control, is unquestionably essential to satisfactory control. This might be modified according to the financial structure on the basis of definite price and statistical measurements, but its origin must be actual cost as properly charged under public supervision to capital account. It must rest upon definite facts that are comprehended within the plan of administration.

As to the next two requirements, which involve basic economic forces, * * * "fair value" does not appear so glaringly unsuited to public purposes, and actual cost or fixed rate base raises at least valid questions as to its desirability. We believe, however, that overbalancing advantages are with prudent investment. If it were conclusively established that a fixed rate base

runs counter to basic forces as claimed by certain economists, this would not count in favor of "fair value" but as proof that public regulation of private companies is a futile policy.

The sixth criterion is both administrative and long-run developmental. Its application depends upon a fixed rate base or exact measurements. As to all three points * * * we expect to show that a fixed rate base is not inconsistent with progress and that it is more in harmony with basic requirements than "fair value." But if all aspects of the rate base are considered, administrative and economic, we feel certain that actual cost must be adopted with possible adjustments made on a definite basis, if regulation is to be established and continued as a reasonably satisfactory policy. (Bauer and Gold, *Public Utility Valuation* (1934), pp. 371–373.)

The following quotation is from an address upon the subject of Power Control, delivered by Franklin D. Roosevelt while he was Governor of New York.

I seek to protect both the consumer and the investor. To that end I propose and advocate now, as I have proposed and advocated heretofore, the following remedies on the part of the government for the regulation and control of public utilities engaged in the power business and companies and corporations relating thereto: * * *

7. Abolishing by law the reproduction cost theory for rate making and establishing in place of it the actual money prudent investment principle as the basis of rate making. (Address of Franklin D. Roosevelt, Portland, Oregon, The Washington Post, September 22, 1932.)

Informed opinion in impressive strength has supported the prudent investment rule for effective rate-making: Bonbright, *Valuation of Property* (1937) Vol. II, p. 1155; Bonbright, *Railroad Valuation With Special Reference to the O'Fallon Decision,* 18 Am. Econ. Rev. Supp. 181 (March 1928); Bonbright, *The Economic Merits of Original Cost and Reproduction Cost,* 41 Har. L. Rev. 593 (1928); Goddard, *Public Utility Valuation;* 15 Mich. L. Rev. 205, 223; Booth, *Prudent Investment, Fair Value and Public Utility Regulation,* 1 Nat. Lawyers Guild Q. 229, 250 (1938); Richberg, *A Permanent Basis for Rate Regulation,* 31 Yale L. J. 263 (1922); Hale, *Conflicting Judicial Criteria of Utility Rates,* 38 Columbia L. Rev. 959 (1938); Riggs, *Depreciation of Public Utility Properties* (1922) pp. 61–62; Webber, *Principles of Public Utility Regulation* (1941) 123; Thompson, *Valuation For Rate-Making,* 1932, 8 J. Land and Pub. Util. Econ. 224 (1932). See: *New York Commission on Revision of Public Service Commissions Law,* Minority Report (1930) 378 et seq.; Clark, *Social Control of Business* (1926) 359; Goddard, *Fair Value of Public Utilities,* 22 Mich. L. Rev. 652, 677, 697; Kauper, *Wanted: A New Definition of the Rate Base,* 37 Mich. L. Rev. 1209; McDairmid, *An Institution Investor Scans the Utility Horizon,* Pub. Util. Fort. Oct. 14, 1937, p. 462.

B. EXPERIENCE SHOWS PRUDENT INVESTMENT TO BE PRACTICABLE AND EQUITABLE AS A RATE BASE

In 1923 Mr. Justice Brandeis, in the *Southwestern Bell Telephone* case, examined the "fair

value" doctrine in his concurring opinion, found that it was "legally and economically unsound," and proposed prudent investment as a constitutional, practicable and equitable basis for rate-making. He stated that "The thing devoted by the investor to the public use is not specific property tangible and intangible, but capital embarked in the enterprise. Upon the capital so invested the Federal Constitution guarantees to the utility the opportunity to earn a fair return." *Southwestern Bell Tel. Co.* v. *Pub. Serv. Com.*, 262 U. S. 276, 289, 290.

Commissions, informed by experience, have discussed and advocated the prudent investment basis as a sound solution to the difficulties of rate-making. During the consideration by this Court of *R. R. Commission* v. *Pacific Gas & Electric Co.*, 302 U. S. 388, the Wall Street Journal on December 28, 1937, published the results of a survey of the views of the various State regulatory commissions on the question of the "fair value" theory. The Commissions which expressed their preference were two to one in favor of the prudent investment basis as the best solution to the rate-making problem. See also, Spurr, *Has Utility Regulation Been Reduced to Negotiation and Wheedling?* Public Utilities Fortnightly, Sept. 2, 1937, p. 262.

The national organization representing 46 State regulatory commissions appointed a "Committee on Progress in the Regulation of Public Utilities" which made its report in 1942 containing the following recommendations as essential to progress in regulation (National Association of Railroad and Utilities Commissioners, Proceedings of 54th Ann. Con. 1942, p. 223):

> 1. Getting all utility books set up on a rigid original cost basis, with inflationary items written off promptly;
> 2. Use of a depreciated original cost rate base in all rate proceedings;
> 3. Use of a rate base of original cost or prudent investment less the depreciation reserve requirement or book reserve, whichever is the higher; * * * *.

The regulatory commissions have hitherto been subjected to a judicially imposed requirement of considering reproduction cost. But a body of experience has in fact been developed in the application of valuations determined without reference to reproduction cost. The public utility commissions of Massachusetts and California have, over a period of years, made use of a valuation principle which is independent of the use of reproduction cost:

> We are indeed fortunate to have the benefit of the actual experience of at least two states with the historical cost doctrine. Both the Massachusetts and California Commissions have, notwithstanding the absence of judicial support, had the courage to follow this principle through many years of regulation. More than any other state Massachusetts has been able to avoid appeal to the courts, while the California Commission's rate decisions have been sustained with few exceptions in both the state and federal courts. (Rooks, Irvin, and Booth, Harry R., *Current Problems of Public Utility Rate Regulation,* 13 Ore. L. Rev. 122, 125 (1934).)

The California Commission has adopted the prudent investment (historical cost) basis for fix-

ing utility rates for several decades and the utilities have generally acquiesced in that method, and have prospered while rendering efficient service. (National Association of Railroad and Utilities Commissioners, Proceedings of 48th Ann. Con. 1936, p. 292). In the recent *Pacific Gas* rate case the California Commission prescribed rates upon the prudent investment basis, which were sustained by the courts (302 U. S. 388; 26 F. Supp. 507), and made this statement:

> This historical method has dominated the Commission's findings for several principal reasons. It is well grounded upon established facts, is not subject to the vagaries of pet theories, unlimited imagination, and abrupt fluctuation of current prices and passing conditions, and therefore indicates a truer measure of value upon which, through the application of rates, a return may be allowed to reimburse the owner for his enterprise and insure the integrity of his capital honestly and prudently invested. At the same time it prevents unwarranted demands upon the consumer through the projection of future rates on ephemeral values and stabilizes rates so that economic shocks from such changes are reduced to a minimum.
>
> It is an economical procedure, where the books of the companies are reasonably well kept, as obtains in practically all of the major utilities of this state, full compliance with which will prevent unwarranted expenditures of money by the Commission, the public and the company, which inures to the benefit of both the consumers and the utility. It is a more rapid procedure insuring quicker compliance with necessities as they arise. (*Re Pacific Gas & Electric Co.*, 1 P. U. R. (N. S.) 1, 11–12).

For additional prudent investment announcements by the California Commission see: *Re Pacific Gas & E. Co.*, P. U. R. 1923C, 385, 405; *Re San Joaquin Light & P. Corp.*, P. U. R. 1922D, 595, 613; *Re Coast Valleys G. & E. Co.*, P. U. R. 1924C, 40, 44; *National City* v. *Sweetwater Water Corp.*, 3 P. U. R. (N. S.) 405, 412–415.

Massachusetts has successfully employed a stable rate base resting primarily on prudent investment. The former Chairman of the Commission stated:

> Our concern in Massachusetts now is that we may be forced to abandon a system of regulation that, on the whole, has worked well for nearly half a century. Financiers and economists outside of our State have asserted, with some heat and vigor, that our system is unsound economically and cannot work successfully; that it is unjust to the corporation and its stockholders, and that as capital is timid, it will not seek investment in public utilities in Massachusetts. Representatives of some of our own electric companies have sung the same song. The answer to this is that the system has been in operation for nearly fifty years; that in all that time, resort to the Federal courts has been sought by electric companies in Massachusetts but twice, both cases being abandoned; that all of the electric companies in our State are in sound financial condition, and, so far as I am aware, none have difficulty in securing the necessary capital for their developments; and that decisions on rate questions are fairly prompt, and hearings and investigations are rarely protracted. We believe that the good faith of Massachusetts can be relied upon by those who invest their capital in public serv-

> ice enterprises, as it can be relied upon by those who lend the State their money. (Attwill, *Weaknesses of the Valuation System,* American Academy of Political and Social Sciences, Annals, Vol. 159 (Jan. 1932), p. 97.)

As early as 1914 the Massachusetts Commission declared:

> * * * capital honestly and prudently invested must, under normal conditions be taken as the controlling factor in fixing the basis for computing fair and reasonable rates * * *. (*Middlesex and Boston Rate Case,* 2 Mass. P. S. C. R. 111, 112.)

For additional cases on the Massachusetts prudent investment principle see: *Bay State Rate Case,* P. U. R. 1916F, 221, 233; *Re New England Tel. & Tel. Co.,* P. U. R. 1925E, 739, 744; *Customers* v. *Worcester Light Co.,* P. U. R. 1927C, 705, 708; *Customers* v. *Northampton Electric Lighting Co.,* 36 P. U. R. (N. S.) 353, 356; see also, Webber, *Principles of Public Utility Regulation With Special Reference To Massachusetts Practice* (1941).

California and Massachusetts have been the outstanding Commissions in the application of the prudent investment principle for many years, and their experiences have demonstrated that prudent investment is a practicable and equitable method. But many other State commissions have also supported the cost or prudent investment basis. For example:

> ARKANSAS: *Arkansas Power & Light Co.* v. *McGehee,* 42 P. U. R. (N. S.) 65, 80 (1941).
> DISTRICT OF COLUMBIA: *Re Potomac Electric Power Co.,* P. U. R. 1923D, 579, 584.

IDAHO: *Re Boise Artesian Water Co.*, 11 A. R., Idaho P. U. C. 155 (1923).
MAINE: *Butler* v. *Lewiston A. & W. St. Ry. Co.*, P. U. R. 1916D, 25, 35.
MARYLAND: *Re Potomac Edison Co.*, 1933B, 6, 19.
MICHIGAN: *Re Michigan Bell Tel. Co.*, 10 P. U. R. (N. S.) 149, 165 (1935).
MONTANA: *Cavanaugh* v. *Whitefish M. W. Utility*, P. U. R. 1922E, 198, 294.
NEW YORK: *Re Iroquois Natural Gas Co.*, P. U. R. 1919D, 76, 87–88.
*Carlson* v. *Jamestown Tel. Corp.*, P. U. R. 1920F, 645, 648.
*Re Sea Cliff & G. C. Gas Co.*, P. U. R. 1921A, 211, 215.
NORTH DAKOTA: *Barth* v. *Hughes & D. Electric Co.*, P. U. R. 1922A, 740, 747.
*Re Midwest Power Co.*, P. U. R. 1922E, 22, 36–37.
OKLAHOMA: *Re Southwestern Bell Tel. Co.*, 9 P. U. R. (N. S.) 113, 136 (1935).
PENNSYLVANIA: *P. U. C.* v. *Solar Electric Co.*, 24 P. U. R. (N. S.) 337, 360–362 (1938).
*P. U. C.* v. *Abington Electric Co.*, 28 P. U. R. (N. S.) 257, 260 (1939).
RHODE ISLAND: *Div. of P. U.* v. *Narragansett Electric Co.*, 27 P. U. R. (N. S.) 106, 108–109 (1939).
SOUTH DAKOTA: *Morris* v. *Northwestern Bell Tel. Co.*, P. U. R. 1922D, 769, 774.
WASHINGTON: *P. S. C.* v. *Spokane Falls Gas L. Co.*, P. U. R. 1921C, 519, 523.
*Dept. P. S.* v. *Grays Harbor R. & L. Co.*, 12 P. U. R. (N. S.) 178, 200 (1936).
*Re Puget Sound Freight Lines*, 35 P. U. R. (N. S.) 452, 455 (1940).
WISCONSIN: *Milwaukee E. R. & Light Co.* v. *Milwaukee*, P. U. R. 1918E, 1, 25–26.
*Marinette* v. *City Water Co.*, 9 P. U. R. (N. S.) 308, 316 (1934).

The leading Federal rate-making bodies have concurred with these commissions in the espousal of the original-cost method and the rejection of the reproduction-cost formula. Commissioner Eastman, of the *Interstate Commerce Commission,* has condemned the "judgment method of valuation" under *Smyth* v. *Ames* and has advocated prudent investment as the workable and just basis. *San Pedro, Los Angeles & Salt Lake R. R. Co.*, 75 I. C. C. 463, 550–557 (1923); *Excess Income of St. Louis & O'Fallon Ry. Co.*, 124 I. C. C. 3, 49–59.

The *Federal Communications Commission,* concerned with the regulation of telephone and telegraph rates, joined in the Government's brief, *amicus curiae,* in *Driscoll* v. *Edison Light & Power Company, No.* 509 October Term 1938 (307 U. S. 104). In that brief it was stated that the "fair value" rule has proved to be unsound and unworkable, and that the rule of prudent investment, combining as it does exactness, ease of application, and a proper principle for the determination of reasonable return, is the standard for rate-making best adapted to modern business conditions and practices in this country.

The *Civil Aeronautics Board,* having the duty of fixing rates for air transportation, has announced its intention to utilize the prudent investment method:

> The presentation, at the rehearing, of the reproduction costs of the carrier's property devoted to transportation service as of December 31, 1941, brings us to the question of the proper use, if any, to be made of such evidence. This Board in exercising its rate making functions has never and does not now measure the reasonableness

of the rate in terms of a fair return upon the so-called "fair value" of the property used and useful in the public service. One of the primary factors, which is frequently controlling, in determining the fair value of such property is its reproduction cost less depreciation. We believe that experience has proved such method to be administratively and economically unsound; its application to public regulated enterprise during the past four decades has placed upon State and Federal regulatory agencies a burdensome, complex, expensive and futile task. Recent opinions of members of the Supreme Court of the United States add to the weight of notable dissents by members of the Court in the past in further reducing the prestige of this rate making formula. We believe that the ascertainment of the capital cost of producing the air transportation service requires that the rate of return should be predicated upon the funds which have been actually and legitimately invested in the transportation enterprise rather than upon any valuation of the carrier's property, and we shall continue to adhere to this method in the future as we have in the past. We accordingly regard reproduction cost evidence as irrelevant and immaterial to the issue of a fair and reasonable rate and evidence of this type in the future will not be admitted to the record in rate proceedings for the purpose of showing the value of the carrier's property. (*Re American Airlines, Inc.*, Dockets Nos. 334 and 204 Civil Aeronautics Board's decision of November 12, 1942, pp. 31–32.)

The *Federal Power Commission* in performing its duty to fix reasonable interstate wholesale rates

for electricity and gas has uniformly adopted the actual cost or prudent investment basis. *Re Interstate Power Co.*, 32 P. U. R. (N. S.) 1, 11 (1939); *Re Safe Harbor Water Power Corp.*, 34 P. U. R. (N. S.) 236, 247 (1940); *Re Chicago District Electric Generating Corp.*, 39 P. U. R. (N. S.) 263, 277 (1941); *Cleveland* v. *Hope Natural Gas Co.*, 44 P. U. R. (N. S.) 1, 24 (1942); *Detroit* v. *Panhandle Eastern Pipe Line Co.*, 45 P. U. R. (N. S.) 203, 214 (1942); *Re Canadian River Gas Co.*, 43 P. U. R. (N. S.) 205, 224 (1942); *Re El Paso Natural Gas Co.*, Docket Nos. G–257, G–242, October 29, 1942 Order Reducing Rates; *Illinois Commerce Commission* v. *Natural Gas Pipeline Co.*, Docket Nos. G–109, G–112, September 19, 1942, Order Accepting Reduced Rates For Filing and Terminating Proceedings; *Re Lone Star Gas Co.*, Docket Nos. G–209, G–208, May 4, 1942, Order Reducing Rates; *Re Northern Natural Gas Co.*, 47 P. U. R. (N. S.) 74, 75 (1943); *Louisiana Public Service Commission* v. *United Gas Pipe Line Co.*, 48 P. U. R. (N. S.) 91; *Re Interstate Natural Gas Co.*, 48 P. U. R. (N. S.) 267.

This imposing weight of administrative precedent, based on a wealth of practical experience and a background of technical competence, would seem sufficient to dispel any doubts as to the rate-base which should be adopted as workable and sound. It lends the support of the expert rate-maker to the pronouncement of Justices Stone and Cardozo that the rule of prudent investment, as propounded by Justice Brandeis, "states the law as it should be." See *St. Joseph Stockyards Co.* v. *United States*, 298 U. S. 38, 93.

# SUPPLEMENT B

## SUMMARY OF COMPARISON OF REPRODUCTION COST ESTIMATES IN RATE CASES [1]

(Detail, pages 90 to 101)

| | No. of cases | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|
| | | Company | City or commission | Excess of company appraisal | |
| Year 1928 | 25 | $67,495,001 | $51,965,943 | $15,529,058 | 29.88 |
| Year 1929 | 32 | 396,382,303 | 267,409,792 | 128,972,511 | 48.23 |
| Year 1930 | 18 | 185,542,529 | 138,940,783 | 46,601,746 | 33.54 |
| Year 1931 | 18 | 321,257,149 | 210,931,858 | 110,325,291 | 52.30 |
| Year 1932 | 10 | 152,413,117 | 74,320,022 | 78,093,095 | 105.08 |
| Year 1933 | 20 | 276,949,277 | 180,569,492 | 96,379,785 | 53.38 |
| Year 1934 | 8 | 69,228,539 | 43,595,083 | 25,633,456 | 58.80 |
| Year 1935 | 9 | 39,088,733 | 29,781,774 | 9,306,959 | 32.34 |
| Year 1936 | 16 | 205,171,349 | 155,231,207 | 49,940,142 | 32.17 |
| Year 1937 | 5 | 59,982,102 | 46,164,509 | 13,817,593 | 29.93 |
| Year 1938 | 5 | 171,897,333 | 148,129,198 | 23,768,135 | 16.05 |
| Year 1939 | 2 | 2,147,954 | 1,488,952 | 659,002 | 44.26 |
| Year 1940 | 4 | 170,055,853 | 126,462,956 | 43,592,897 | 34.47 |
| Year 1941 | 4 | 11,995,845 | 10,646,420 | 1,349,425 | 12.67 |
| Year 1942 | 2 | 2,133,700 | 1,767,178 | 366,522 | 20.74 |
| Total | | 2,131,740,784 | 1,487,405,167 | 644,335,617 | 43.32 |

[1] The cases shown in this appendix are all the cases reported in Public Utility Reports for the years 1928 to 1942, inclusive, for which comparable information was given.

*Reproduction cost estimates in rate cases—1928–1942*

YEAR 1928

| Name of case | Jurisdiction | P. U. R. reference | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|---|
| | | | Company | City or commission | Excess of company appraisal | |
| 1. Re Home Telephone Company | Indiana P. S. C | 1928 A 450 | $1,187,746 | $998,681 | $189,065 | 18.93 |
| 2. Re Georgia Power Company | Georgia P. S. C | 1928 A 834 | 23,352,860 | 19,614,216 | 3,738,644 | 19.06 |
| 3. Knoxville *v.* South Pittsburg Water Co | Pennsylvania P. S. C | 1928 B 211 | 9,112,933 | 8,211,343 | 901,590 | 10.98 |
| 4. Re Clarksburg Light & Heat Co | West Virginia P. S. C | 1928 B 296 | 4,482,000 | 2,004,143 | 2,477,857 | 123.64 |
| 5. Shamokin *v.* Roaring Creek Water Co | Pennsylvania P. S. C | 1928 B 393 | 4,000,000 | 2,000,000 | 2,000,000 | 100.00 |
| 6. City of Erie et al. *v.* Mutual Telephone Company | Pennsylvania P. S. C | 1928 B 537 | 5,023,494 | 421,828 | 771,666 | 18.15 |
| 7. Clearfield *v.* Clearfield Water Company | Pennsylvania P. S. C | 1928 B 633 | 803,379 | 413,344 | 390,035 | 94.36 |
| 8. Re Pomona Valley Telephone and Telegraph Union | California R. R. Com | 1928 B 707 | 729,231 | 684,350 | 44,881 | 6.56 |
| 9. Re Northwestern Indiana Telephone Co. et al | Indiana P. S. C | 1928 B 729 | 545,672 | 491,179 | 54,493 | 11.09 |
| 10. Re Clinton County Telephone Co | Missouri P. S. C | 1928 B 798 | 221,017 | 200,231 | 20,786 | 10.38 |
| 11. Re Pekin Water Works Co | Illinois Commerce Com | 1928 C 269 | 639,146 | 541,370 | 97,776 | 18.06 |
| 12. Re Associated Telephone Co | Indiana P. S. C | 1928 C 295 | 340,332 | 273,000 | 67,332 | 24.66 |
| 13. Borough of Keyport *v.* County Gas Company | New Jersey Board of Public Utility Comrs. | 1928 C 327 | 1,749,481 | 1,160,444 | 589,037 | 50.76 |
| 14. Re Capital City Water Company | Missouri P. S. C | 1928 C 442 | 880,779 | 677,314 | 203,465 | 30.04 |
| 15. Re Guilford Chester Water Co | Connecticut P. U. C | 1928 C 549 | 1,548,786 | 1,168,801 | 379,985 | 32.51 |
| 16. Re Madison Railways Co | Wisconsin R. R. Com | 1928 C 844 | 1,960,216 | 1,203,000 | 757,216 | 62.94 |
| 17. University City *v.* West St. Louis Water & Light Co | Missouri P. S. C | 1928 D 337 | 6,261,899 | 4,460,278 | 1,801,621 | 40.38 |
| 18. Re Capital City Telephone Co | Missouri P. S. C | 1928 D 766 | 291,554 | 218,395 | 73,159 | 33.50 |
| 19. Dept. of Public Works *v.* Morton Electric Co | Washington Dept. Pub. Wks | 1928 D 813 | 34,179 | 20,064 | 14,115 | 70.35 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 20. Re Decatur County Independent Telephone Co. | Indiana P. S. C. | 1928 E 5 | 360,000 | 325,000 | 35,000 | 10.77 |
| 21. Re Lexington Water Company | Missouri P. S. C. | 1928 E 329 | 390,117 | 275,216 | 114,901 | 41.75 |
| 22. Re Elwood Water Company | Indiana P. S. C. | 1928 E 702 | 650,000 | 329,529 | 320,471 | 97.25 |
| 23. Re Logansport Telephone Company | Indiana P. S. C. | 1928 E 719 | 932,245 | 640,044 | 292,201 | 45.65 |
| 24. Santa Barbara v. Southern Counties Gas Company. | California R. R. Com. | 1928 E 771 | 1,479,935 | 1,488,423 | 8,488 | (0-57) |
| 25. Electric Public Utility Company v. Public Service Commission. | Maryland Circuit Court | 1928 E 856 | 518,000 | 315,750 | 202,250 | 64.05 |
| Total for 1928 | | | 67,495,001 | 51,965,943 | 15,529,058 | 29.88 |

YEAR 1929

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Mayor of Hyattsville v. Washington Suburban Gas Co. | Maryland Public Service Commission. | 1929 E 4, 6 | $892,984 | $685,140 | $207,844 | 30.34 |
| 2. Re Public Service Electric and Gas Co. | New Jersey Board of Public Utilities Commissioners. | 1929 E 17 | 197,673,670 | 114,408,002 | 83,265,668 | 72.78 |
| 3. Re Minier Mutual Telephone Company | Illinois Commerce Commission | 1929 E 235 | 135,133 | 97,785 | 37,348 | 38.19 |
| 4. Public Utilities Commission v. Camden & Rockland Water Co. | Maine Public Utilities Commission. | 1929 E 325, 330 | 1,311,667 | 1,157,924 | 153,743 | 13.28 |
| 5. Re City of Fresno | California Railroad Commission | 1929 E 503, 507 | 3,030,754 | 1,662,601 | 1,368,153 | 82.29 |
| 6. Re Lincoln Telephone & Telegraph Company | Nebraska State Railway Commission. | 1929 E 512 | 314,834 | 268,653 | 46,181 | 17.19 |
| 7. Re Southern California Telephone Company | California Railroad Commission | 1929 E 610, 613 | 100,000,000 | 97,100,000 | 2,900,000 | 2.99 |
| 8. Re Southern Indiana Telephone Company | Indiana Public Service Commission. | 1929 E 641, 645 | 64,029 | 58,573 | 5,456 | 9.31 |
| 9. R. Illinois Water Service Company | Illinois Commerce Commission | 1929 E 650, 652 | 746,763 | 569,705 | 177,058 | 31.08 |
| 10. Plainfield-Union Water Co. v. Board of Public Util. Commissioners of N. J. | United States District Court, D. New Jersey. | 1929 D 3, 13, 23 | 6,066,823 | 3,243,677 | 2,823,146 | 87.04 |
| 11. Re Oconto City Water Supply Company | Wisconsin Railroad Commission | 1929 D 65 | 301,082 | 211,574 | 89,508 | 42.31 |

*Reproduction cost estimates in rate cases—1928–1942*—Continued

YEAR 1929—Continued

| Name of case | Jurisdiction | P. U. R. reference | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|---|
| | | | Company | City or commission | Excess of company appraisal | |
| 12. Re Lincoln Telephone & Telegraph Company. | Nebraska State Railway Commission. | 1929 D 116, 119 | $53,817 | $40,194 | $13,623 | 33.89 |
| 13. Re Lambertville Water Co | N. J. Board of Public Util. Commissioners. | 1929 D 138 | 203,984 | 114,772 | 89,212 | 77.73 |
| 14. Franke *v.* Johnstown Tel. Co | Pa. Public Service Comm | 1929 D 161 | 2,403,115 | 1,719,507 | 683,608 | 39.76 |
| 15. Columbia *v.* Columbia Water Co | Pa. Public Service Comm | 1929 D 269 | 498,431 | 372,481 | 125,950 | 33.81 |
| 16. Greencastle Water Works Co. *v.* P. S. Comm. of Indiana et al. | U. S. Dist. Ct. S. D. Indiana, Indianapolis Division. | 1929 D 287, 293, 294, 295. | 523,500 | 334,164 | 189,336 | 56.66 |
| 17. James W. Sharp et al. *v.* Newville Water Co | Pa. Public Service Comm | 1929 D 618 | 67,474 | 40,238 | 27,236 | 67.69 |
| 18. Re City of Los Angeles et al | Cal. R. R. Comm | 1929 C 389, 396 | 827,818 | 668,330 | 159,488 | 23.86 |
| 19. City of Erie *v.* Pa. P. S. Comm | Pa. Superior Court | 1929 C 568 | 5,023,494 | 4,251,828 | 771,666 | 18.15 |
| 20. Worcester Electric Lt. Co. *v.* Henry C. Atwill et al. | U. S. District Court, Massachusetts. | 1929 B 1, 34 | 16,242,027 | 9,898,805 | 6,343,222 | 64.08 |
| 21. P. S. Comm. *v.* Great Northern Utilities Co | Montana P. S. Comm | 1929 B 177 | 199,709 | 36,267 | 163,442 | 450.66 |
| 22. James W. Sharp et al. and Borough of Newville *v.* Newville Water Co. | Penn. P. S. Comm | 1929 B 320 | 67,474 | 40,238 | 27,236 | 67.69 |
| 23. Re Madison Telephone Co | Nebr. State Railway Comm | 1929 B 385 | 103,379 | 91,825 | 11,554 | 12.58 |
| 24. Re Middle States Telephone Co | Ill. Comm. Comm | 1929 B 390, 393 | 582,196 | 567,042 | 15,154 | 2.67 |
| 25. Re Dixon Water Co | Ill. Comm. Comm | 1929 B 403 | 491,885 | 434,027 | 57,858 | 13.33 |
| 26. Re Vermont Teleph. & Exch. Co | Ill. Comm. Comm | 1929 B 411 | 17,923 | 14,611 | 3,312 | 22.67 |
| 27. Pittsburgh *v.* Peoples Natural Gas Co | Penn. P. S. Comm | 1929 B 526, 529 | 53,426,392 | 24,374,307 | 29,052,085 | 119.19 |
| 28. Re Middle States Utilities Co | Mo. P. S. Comm | 1929 B 554, 556 | 72,011 | 56,351 | 15,660 | 27.79 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 29. Jones *v.* Wabash Valley Elec. Co | Indiana P. S. Comm | 1929 B 562 | 88,721 | 72,157 | 16,564 | 22.96 |
| 30. University City *v.* West St. Louis Water & Light Co. | Mo. P. S. Comm | 1929 B 612 | 4,331,634 | 4,278,427 | 53,207 | 1.24 |
| 31. Re Northern Indiana Tel. Co | Ind. P. S. Comm | 1929 A 74 | 564,340 | 506,597 | 57,743 | 11.40 |
| 32. Long *v.* Snow Shoe Water Co | Penn. P. S. Comm | 1929 A 655 | 55,240 | 33,990 | 21,250 | 62.52 |
| Total for 1929 | | | 396,382,303 | 267,409,792 | 128,972,511 | 48.23 |

YEAR 1930

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Re Salamonia Tel. Co | Ind. P. S. Comm | 1930 E 39, 40 | $29,352 | $17,899 | $11,453 | 63.99 |
| 2. Re Cambridge Home Tel. Co | Ohio P. U. Comm | 1930 E 65, 73 | 630,396 | 395,576 | 234,820 | 59.36 |
| 3. Re Ind. Service Corp | Ind. P. S. Comm | 1930 E 276, 278 | 6,106,011 | 5,664,009 | 442,002 | 7.80 |
| 4. Re Kansas City Public Service Co | Mo. P. S. Comm | 1930 E 384, 395 | 40,615,610 | 33,826,216 | 6,789,394 | 20.07 |
| 5. Re Iroquois Gas Corp | N. Y. Dept. of Public Service, State Div., P. S. Comm. | 1930 D 31, 32 | 53,430,014 | 27,137,668 | 26,292,346 | 96.89 |
| 6. Me. P. U. Comm. *v.* Gould Elec. Co | Me. P. U. Comm | 1930 D 289, 294 | 546,495 | 375,630 | 170,865 | 45.49 |
| 7. Re Home Telephone Co | Ind. P. S. Comm | 1930 D 481 | 243,647 | 157,738 | 85,909 | 54.46 |
| 8. Re Mich. Federated Utilities, Mt. Clemens Division. | Mich. P. U. Comm | 1930 D 506 | 1,453,088 | 1,413,733 | 39,355 | 2.78 |
| 9. Fort Worth Gas Co. *v.* City of Fort Worth et al | U. S. Dist. Ct. N. D., Texas, Fort Worth Division. | 1930 C 203, 205, 210 | 6,297,976 | 3,426,570 | 2,871,406 | 83.80 |
| 10. Re Pacific Telephone & Telegraph Co | Cal. R. R. Comm | 1930 C 481, 498 | 63,086,600 | 56,863,987 | 6,222,613 | 10.94 |
| 11. Vincennes Water Supply Co. *v.* P. S. Comm. of Ind. | U. S. Circuit Court of Appeals Seventh Circuit. | 1930 B 216, 220, 221 | 1,163,719 | 778,769 | 384,950 | 49.43 |
| 12. Re Starke County Tel. Co | Ind. P. S. Comm | 1930 B 336 | 58,544 | 49,351 | 9,193 | 18.63 |
| 13. Re Northwestern Ind. Tel. Co | Ind. P. S. Comm | 1930 B 431, 434 | 199,350 | 181,477 | 17,873 | 9.85 |
| 14. Re Ill. Bell Tel. Co., Decatur Exchange | Ill. Comm. Comm | 1930 B 455, 456 | 2,076,386 | 1,865,078 | 211,308 | 11.33 |
| 15. Re Wisconsin Public Util. Co | Wis. R. R. Comm | 1930 A 119 | 564,584 | 500,526 | 64,058 | 12.80 |
| 16. Re Ill. Bell Tel. Co., Edwardsville Exchange | Ill. Comm. Comm | 1930 A 143, 145 | 269,492 | 220,283 | 49,209 | 22.34 |

*Reproduction cost estimates in rate cases—1923–1942*—Continued

YEAR 1930—Continued

| Name of case | Jurisdiction | P. U. R. reference | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|---|
| | | | Company | City or commission | Excess of company appraisal | |
| 17. West Palm Beach Water Co. *v.* City of West Palm Beach. | U. S. Dist. Ct. Sou. Dist. of Florida. | 1930 A 177, 187 | $5,969,186 | $3,544,835 | $2,424,351 | 68.39 |
| 18. Re Citizens Independent Tel. Co | Ind. P. S. Comm | 1930 A 431 | 2,802,079 | 2,521,438 | 280,641 | 11.13 |
| Total for 1930 | | | 185,542,529 | 138,940,783 | 46,601,746 | 33.54 |

YEAR 1931

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Village of Blair *v.* Northern States Power Company. | Wisconsin R. R. Commission | 1931 A 91 | $22,357 | $15,482 | $6,875 | 44.41 |
| 2. Re Los Angeles Gas & Electric Corp | California R. R. Commission | 1931 A 147, A 166 | 95,767,351 | 65,500,000 | 30,267,351 | 46.21 |
| 3. Re Southern Indiana Gas & Elec. Co | Indiana P. S. C. | 1931 A 404 | 689,455 | 598,275 | 91,180 | 15.24 |
| 4. Re Johnson County Telephone Co | Indiana P. S. C | 1931 A 451 | 401,443 | 303,881 | 97,562 | 32.11 |
| 5. Re Bowdoin Utilities Company | Montana P. S. C | 1931 B 35, B 42 | 750,564 | 622,606 | 127,958 | 20.55 |
| 6. Re Ohio Bell Telephone Company | Ohio P. U. C | 1931 B 51 | 144,995,146 | 91,061,900 | 53,933,246 | 59.23 |
| 7. Re Springfield City Water Company | Missouri P. S. C | 1931 B 82 | 4,066,500 | 3,203,566 | 862,934 | 26.94 |
| 8. Re Beckley Water Company | West Virginia P. S. C | 1931 B 279 | 532,404 | 323,495 | 205,909 | 63.07 |
| 9. Re United Corporation | Indiana P. S. C | 1931 B 501 | 102,409 | 74,059 | 28,350 | 38.28 |
| 10. City of Elko *v.* Elko Lamoille Power Company | Nevada P. S. C | 1931 C 20 | 428,759 | 319,909 | 108,850 | 34.03 |
| 11. Re Mondovi Telephone Company | Wisconsin R. R. Commission | 1931 C 442 | 61,412 | 56,252 | 5,160 | 9.17 |
| 12. Re Escanaba Power & Traction Co | Michigan P. U. C | 1931 D 154 | 2,162,364 | 1,428,223 | 734,141 | 51.40 |
| 13. Re Utica Gas & Electric Company | New York Dept. of P. S. State | 1931 D 339 | 20,285,500 | 9,246,468 | 11,039,032 | 119.39 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 14. Re City of Spooner | Div. Public Service Commission. | | | | | |
| 15. Re Community Telephone Co | Wisconsin R. R. Com | 1931 E 43 | 99,657 | 54,805 | 44,852 | 81.84 |
| 16. City of Charleston et al. v. Public Service Commission. | Wisconsin P. S. C | 1931 E 63 | 64,362 | 56,998 | 7,364 | 12.92 |
| 17. Re Michigan Home Telephone Co | W. Va. Supreme Court of Appeals. | 1931 E 76 | 38,243,345 | 26,569,430 | 11,673,915 | 43.94 |
| 18. Re Atlanta Gas Company | Michigan P. U. C | 1931 E 440 | 1,643,302 | 1,475,384 | 167,918 | 11.38 |
| | Georgia P. S. C | 1931 E 464, E 466 | 10,940,819 | 10,018,125 | 922,694 | 9.21 |
| Total for 1931 | | | 321,257,149 | 210,931,858 | 110,325,291 | 52.30 |

YEAR 1932

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. City of Vincennes v. Vincennes Water Supply Co. | Indiana P. S. C | 1932 A 21 | $1,517,810 | $611,588 | $906,222 | 148.18 |
| 2. International Railway Co. v. William A. Prendergast, et al. | U. S. District Court, Western District of N. Y. | 1932 A 167 | 55,000,000 | 18,788,884 | 36,211,116 | 192.73 |
| 3. Re United Fuel Gas Co | W. Virginia P. S. C | 1932 B 66 | 47,186,190 | 29,659,150 | 17,527,040 | 59.09 |
| 4. City of Moncton v. Moncton Tramways, Electricity & Gas Company, Ltd. | New Brunswick Board of Comrs. of P. U. | 1932 B 374 | 385,214 | 336,020 | 49,194 | 14.64 |
| 5. Re Alexandria Water Co | Virginia State Corp. Com | 1932 C 350 | 2,026,895 | 1,145,000 | 881,895 | 77.02 |
| 6. Scranton-Spring Brook Water Service Company et al. v. Public Service Commission of Pennsylvania. | Pennsylvania Superior Court | 1932 C 477 | 39,976,705 | 19,586,596 | 20,390,109 | 104.10 |
| 7. Re City of Visalia | California R. R. Commission | 1932 C 520 | 248,408 | 89,329 | 159,079 | 178.08 |
| 8. Re Ohio Central Telephone Corp | Ohio P. U. C | 1932 D 441 | 1,594,203 | 953,511 | 640,692 | 67.19 |
| 9. Central Kentucky Gas Co. v. Railroad Comsion of Kentucky et al. | U. S. District Court, Eastern Dist. of Ky. | 1932 E 71 | 2,028,069 | 1,189,489 | 838,580 | 70.50 |
| 10. Re Missouri Utilities Company et al | Missouri P. S. C | 1932 E 462 | 2,449,623 | 1,960,455 | 489,168 | 24.95 |
| Total for 1932 | | | 152,413,117 | 74,320,022 | 78,093,095 | 105.08 |

*Reproduction cost estimates in rate cases—1928–1942*—Continued

YEAR 1933

| Name of case | Jurisdiction | P. U. R. reference | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|---|
| | | | Company | City or commission | Excess of company appraisal | |
| 1. Public Util. Comm. etal, v. Newport Water Corp | R. I. Public Util. Comm | 1933 E 1 | $3,533,087 | $2,241,720 | $1,291,367 | 57.61 |
| 2. Borough of Grove City v. Union Heat & Light Co | Penn. P. S. Comm | 1933 E 90 | 823,344 | 430,477 | 392,867 | 91.26 |
| 3. City of Mauston v. Mauston Tel. Co | Wis. P. S. Comm | 1933 E 161 | 55,903 | 48,842 | 7,061 | 14.46 |
| 4. City of Seattle v. Seattle Gas Co | Wash. Dept. of Public Works | 1933 E 253 | 15,327,289 | 11,761,320 | 3,565,969 | 30.32 |
| 5. City of Trenton v. Mo. Public Service Company | Mo. P. S. Comm | 1933 E 270 | 288,890 | 231,972 | 56,918 | 24.54 |
| 6. P. S. Comm. of Mo. v. East Mo. Power Co | Mo. P. S. Comm | 1933 E 369 | 707,566 | 548,276 | 159,290 | 29.05 |
| 7. City of Wheeling v. Natural Gas Co. of W. Va | W. Va. P. S. Comm | 1933 D 1, 21 | 10,661,736 | 6,695,387 | 3,366,349 | 50.28 |
| 8. Clark's Ferry Bridge Co. v. P. S. Comm. of Pa | Pa. Superior Court | 1933 D 173, 178 | 1,029,297 | 741,871 | 287,426 | 38.74 |
| 9. Mont. P. S. Comm. v. Billings Gas Co. (and Gallatin Natural Gas Co.). | Mont. P. S. Comm | 1933 D 341 | 1,165,798<br>1,678,826 | 719,331<br>949,723 | 446,467<br>729,103 | 62.07<br>76.77 |
| 10. Okla. Corp. Comm. Re Lone Star Gas Co. et al | Okla. Corp. Comm | 1933 C 1, 17, 22 | 70,595,343 | 41,391,666 | 29,203,677 | 70.55 |
| 11. Re Indiana (Interstate) Public Service Company. | Ind. Public Service Comm | 1933 C 274 | 209,681 | 155,000 | 54,681 | 35.28 |
| 12. Re Broad River Power Co | S. C. R. R. Comm | 1933 C 351, 359 | 26,319,132 | 12,847,671 | 13,471,461 | 104.86 |
| 13. Re Potomac Edison Co | Maryland P. S. Comm | 1933 B 6, 41 | 14,801,560 | 10,131,370 | 4,670,190 | 46.10 |
| 14. Re Yonkers Railroad Co | N. Y. Dept. of P. S., State Division. | 1933 B 61, 65 | 5,104,648 | 3,851,865 | 1,252,783 | 32.52 |
| 15. Elko-Lamoille Power Co. v. P. S. Comm. of Nevada et al. | U. S. Dist. Ct. D. Nevada | 1933 B 191, 193 | 518,138 | 372,884 | 145,254 | 38.95 |
| 16. Wichita Gas Co. v. P. S. Comm. of Kans | U. S. Dist. Ct. D. Kansas, First Division. | 1935 B 225, 242, 243 | 105,000,000 | 73,000,000 | 32,000,000 | 43.84 |
| 17. Re Augusta Lt. & Tel. Co | Wis. P. S. Comm | 1933 B [illegible], 481 | 38,512 | 24,477 | 14,035 | 57.34 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18. Fort Fairfield Lt. & Pr. Co et al. v. Me. Public Service Co. | Me. P. S. Comm | 1933 B 493 | 1, 882, 508 | 1, 504, 864 | 377, 644 | 25. 09 |
| 19. Re Patrons of Clinton Electric Lt. & Pr. Co | Conn. P. U. Comm | 1933 A 467, 472 | 355, 450 | 254, 107 | 101, 343 | 39. 88 |
| 20. Re Northwestern Elec. Co | Oreg. P. U. Comm | 1933 A 493, 499 | 17, 452, 569 | 12, 666, 669 | 4, 785, 900 | 37. 78 |
| Total for 1933 | | | 276, 949, 277 | 180, 569, 492 | 96, 379, 785 | 53. 38 |
| **YEAR 1934** | | | | | | |
| 1. City of Douglas v. Arizona Edison Co | Arizona Corporation Comm | 1 (NS) 501 | $603, 455 | $306, 994 | $296, 461 | 96. 57 |
| 2. Chesapeake & Potomac Telephone Co | Maryland P. S. C | 1 (NS) 350 | 48, 144, 672 | 32, 498, 094 | 15, 646, 578 | 48. 15 |
| 3. Texas Border Gas Co. v. City of Laredo | Texas R. R. Comm | 2 (NS) 509 | 1, 231, 601 | 810, 698 | 420, 903 | 51. 92 |
| 4. Re City of Yuma | Arizona Corporation Comm | 2 (NS) 17 | 1, 277, 059 | 466, 879 | 810, 180 | 173. 53 |
| 5. Re Commonwealth Ex Rel Rosslyn Gas Company. | Virginia Corporation Comm | 3 (NS) 67 | 780, 654 | 392, 097 | 388, 557 | 99. 10 |
| 6. City of National City v. The Sweetwater Water Corp. | California R. R. Comm | 3 (NS) 412 | 2, 471, 491 | 1, 316, 726 | 1, 154, 765 | 87. 70 |
| 7. Dept. Pub. Works of Washington v. Seattle Gas Co. | Washington Dept. Pub. Works | 3 (NS) 460, 468 | 14, 198, 953 | 7, 416, 826 | 6, 782, 127 | 91. 44 |
| 8. Dept. Pub. Works of Washington v. Washington Water Power Co. | Washington Dept. Pub. Works | 4 (NS) 376, 377 | 520. 654 | 386, 769 | 153, 885 | 34. 62 |
| Total for 1934 | | | 69, 228, 539 | 43, 595, 083 | 25, 633, 456 | 58. 80 |

*Reproduction cost estimates in rate cases—1928–1942*—Continued

YEAR 1935

| Name of case | Jurisdiction | P. U. R. reference | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|---|
| | | | Company | City or commission | Excess of company appraisal | |
| 1. City of Wheeling *v.* Natural Gas Co. of W. Va. | W. Va. S. C. A. | 5 (NS) 475 | $9,468,016 | $8,766,362 | $701,654 | 8.00 |
| 2. Re Central Arizona Light & Power Co. | Arizona Corporation Comm. | 6 (NS) 55 | 16,035,563 | 10,706,530 | 5,299,033 | 49.48 |
| 3. City of Fredericton *v.* Maritime Electric Co. Ltd. | New Brunswick Bd. P. U. Comm. | 6 (NS) 165 | 158,298 | 135,199 | 23,099 | 17.08 |
| 4. City of Sullivan *v.* Missouri Electric Power Co. | Missouri P. S. C. | 6 (NS) 237 | 1,385,840 | 1,281,945 | 103,895 | 8.10 |
| 5. Alexandria Water Company *v.* City Council of Alexandria. | Virginia S. C. A. | 7 (NS) 74 | 1,959,376 | 1,382,637 | 576,739 | 41.71 |
| 6. Frackville Taxpayers Assn. *v.* Frackville Sewerage Co. | Pennsylvania P. S. C. | 7 (NS) 521 | 180,320 | 109,561 | 70,759 | 64.58 |
| 7. D. P. W. of Washington *v.* Oregon-Washington W. Ser. Co. | Washington Dept. P. W. | 8 (NS) 301 | 80,978 | 41,420 | 39,558 | 95.50 |
| 8. Mallette *v.* Terrington Water Co. | Connecticut P. U. C. | 9 (NS) 83, 85 | 1,616,036 | 1,363,311 | 252,725 | 18.54 |
| 9. Re Southwestern Bell Telephone Company. | Oklahoma Corp. Comm. | 9 (NS) 139 | 8,234,306 | 5,994,809 | 2,239,497 | 37.36 |
| Total for 1935 | | | 39,088,733 | 29,781,774 | 9,306,959 | 32.34 |

YEAR 1936

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Re Washington Gas Light Co | Dist. of Columbia, P. U. C | 11 (NS) 138 | $19,947,371 | $14,770,885 | $5,176,486 | 35.04 |
| 2. Re Boston Consolidated Gas Co | Massachusetts Dept. of P. U | 12 (NS) 124 | 52,996,740 | 31,813,019 | 21,186,721 | 66.60 |
| 3. Re The New Rochelle Water Co | New York Dept. of Public Service | 12 (NS) 284 | 3,391,072 | 2,223,429 | 1,168,643 | 52.56 |
| 4. Torrington v. Torrington Electric Light Co | Connecticut P. U. Comm | 13 (NS) 30, 33 | 2,369,333 | 2,090,452 | 274,881 | 13.15 |
| 5. Re Upstate Telephone Corporation of New York. | New York Dept. of Public Service | 13 (NS )143 | 4,256,734 | 3,259,921 | 996,813 | 30.58 |
| 6. Dept. of Pub. Serv. of Washington v. Pacific Power & Lt. Co. | Washington Dept. of Public Service. | 13 (NS) 197 | 16,543,038 | 13,354,234 | 3,188,804 | 23.88 |
| 7. Re Wisconsin Telephone Company | Wisconsin P. S. C | 13 (NS) 273 | 60,288,374 | 49,256,212 | 11,032,162 | 22.40 |
| 8. Pacific Telephone & Telegraph Co. v. Thomas | Oregon Circuit Ct. City of Multnomah. | 13 (NS) 359 | 38,279,800 | 32,710,045 | 5,569,755 | 17.03 |
| 9. Pub. Serv. Comm. of Missouri v. Missouri Pub. Serv. Co. | Missouri P. S. C | 15 (NS) 9, 10 | 6,498,895 | 5,310,286 | 1,188,609 | 22.38 |
| 10. Re Community Natural Gas Co | Texas R. R. Comm | 15 (NS) 155 | 599,992 | 442,724 | 157,268 | 35.52 |
| Total for 1936 | | | 205,171,349 | 155,231,207 | 49,940,142 | 32.17 |

YEAR 1937

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. Re Southwestern Bell Telephone Co | Oklahoma Corp. Comm | 16 (NS) 3 | $8,847,735 | $7,240,192 | $1,607,543 | 22.20 |
| 2. Re Arizona Power Company | Arizona Corp. Comm | 16 (NS) 489 | 6,973,870 | 4,191,747 | 2,782,123 | 66.37 |
| 3. Arkansas-Louisiana Gas Co. v. City of Texarkana. | U. S. Dist. Court | 17 (NS) 254 | 35,041,826 | 28,217,684 | 6,824,142 | 24.18 |
| 4. Public Service Comm. of Missouri v. Ozark Utilities Co. | Missouri P. S. C | 18 (NS) 413 | 1,363,830 | 1,137,223 | 226,607 | 19.93 |
| 5. Lone Star Gas Co. v. City of Fort Worth | Texas R. R. Comm | 20 (NS) 96 | 7,754,841 | 5,377,663 | 2,377,178 | 44.21 |
| Total for 1937 | | | 59,982,102 | 46,164,509 | 13,817,593 | 29.93 |

*Reproduction cost estimates in rate cases—1928–1942*—Continued

YEAR 1938

| Name of case | Jurisdiction | P. U. R. reference | Appraisal amounts | | | Percent excess of company appraisal |
|---|---|---|---|---|---|---|
| | | | Company | City or commission | Excess of company appraisal | |
| 1. Public Utilities Comm. of Utah v. Utah Power & Light Co. | Utah P. S. C. | 22 (NS) 55 | $78,052,415 | $64,399,504 | $13,652,911 | 21.20 |
| 2. Re Mystic Valley Water Co | Connecticut P. U. C. | 23 (NS) 44, 45 | 690,142 | 605,852 | 84,290 | 13.91 |
| 3. Re Indianapolis Power & Light Co. | Indiana P. S. C. | 23 (NS) 371 | 51,482,651 | 46,871,234 | 4,611,417 | 9.90 |
| 4. Public Utility Commission v. Solar Electric Co | Pennsylvania P. U. C. | 24 (NS) 355 | 282,085 | 103,978 | 178,107 | 171.29 |
| 5. Re Capital Transit Company | Dist. of Columbia P. U. C. | 25 (NS) 196 | 41,390,040 | 36,148,630 | 5,241,410 | 14.50 |
| Total for 1938 | | | 171,897,333 | 148,129,198 | 23,768,135 | 16.05 |

YEAR 1939

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. City of Jefferson v. Capital City Water Co. | Missouri R. S. C. | 27 (NS) 81 | $632,559 | $585,284 | $47,275 | 8.08 |
| 2. Public Utility Commission v. Abington Electric Co. | Pennsylvania P. U. C. | 28 (NS) 259, 260 | 1,515,395 | 903,668 | 611,727 | 67.69 |
| Total for 1939 | | | 2,147,954 | 1,488,952 | 659,002 | 44.26 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **YEAR 1940** | | | | | | |
| 1. Peoples Gas Light & Coke Co. v. Slattery | Illinois Supreme Court | 31 (NS) 207 | $165,682,411 | $122,992,633 | $42,689,778 | 34.71 |
| 2. N. J. Suburban Water Co. v. Bd. of Public Util. Commrs. | New Jersey Ct. of Errors and Appeals. | 31 (NS) 225 | 271,553 | 163,292 | 108,261 | 66.30 |
| 3. Re Georgia Power & Light Co. | Georgia P. S. C. | 31 (NS) 150, 153 | 3,201,044 | 2,776,384 | 424,660 | 13.30 |
| 4. Re Montana-Dakota Utilities Co. | Montana P. S. C. | 31 (NS) 233, 234 | 900,845 | 530,647 | 370,198 | 69.76 |
| Total for 1940 | | | 170,055,853 | 126,462,956 | 43,592,897 | 34.47 |
| **YEAR 1941** | | | | | | |
| 1. Re Hampton Water Works | New Hampshire P. S. C. | 36 (NS) 417 | $786,311 | $427,871 | $358,440 | 83.77 |
| 2. Re Albany Telephone Co | Missouri P. S. C. | 36 (NS) 185 | 98,492 | 84,905 | 13,587 | 16.00 |
| 3. Re Tampa Electric Co | Tampa (Florida) Utility Board | 37 (NS) 466 | 8,216,683 | 7,865,821 | 350,862 | 4.46 |
| 4. Re Atlantic City Sewerage Co. | New Jersey Board of P. U. Commrs. | 38 (NS) 242, 244 | 2,894,359 | 2,267,823 | 626,536 | 27.63 |
| Total for 1941 | | | 11,995,845 | 10,646,420 | 1,349,425 | 12.67 |
| **YEAR 1942** | | | | | | |
| 1. Arkansas Power & Light Co. v. McGehee | Arkansas Dept. of P. U. | 42 (NS) 76 | $148,075 | $107,131 | $40,944 | 38.22 |
| 2. Re Twin City Pipe Line Co. | Arkansas Dept. of P. U. | 42 (NS) 93 | 1,985,625 | 1,660,047 | 325,578 | 19.61 |
| Total for 1942 | | | 2,133,700 | 1,767,178 | 366,522 | 20.74 |



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# In the Supreme Court of the United States

**OCTOBER TERM, 1942.**

FEDERAL POWER COMMISSION, CITY OF AKRON AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONERS,
v.
HOPE NATURAL GAS COMPANY.
**No. 890**

THE CITY OF CLEVELAND,
*Petitioner,*
v.
HOPE NATURAL GAS COMPANY,
*Respondent.*
**No. 891**

## BRIEF ON BEHALF OF HOPE NATURAL GAS COMPANY

**In Opposition to the Petitions for a Writ of Certiorari.**

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v.

HOPE NATURAL GAS COMPANY.

No. 890

THE CITY OF CLEVELAND,

*Petitioner,*

v.

HOPE NATURAL GAS COMPANY,

*Respondent.*

No. 891

## BRIEF ON BEHALF OF HOPE NATURAL GAS COMPANY

**In Opposition to the Petitions for a Writ of Certiorari.**

Both of the above cases involve the same matter and we therefore file one brief.

### OPINIONS BELOW.

The opinion of the Circuit Court of Appeals (R. IV, 169-207) is now officially reported in 134 Fed. (2d) 287. The opinion of the Federal Power Commission (R. I, 16-89) is reported in 44 P. U. R. (N. S.) 1.

### STATEMENT.

We supplement the statement made by the petitioners as follows:

Hope's present natural gas properties, all in West Virginia, were constructed and put into use over a period of nearly fifty years. Approximately one-half were con-

structed prior to 1917 at a cost of about $25,000,000 and the other half since that time at a cost of about $45,000,000 (R. IV, 171). This statement of original cost totaling nearly $70,000,000 as of December 31, 1938 (Ex. 20, R. I, 167, 193) conforms to the definition of original cost of Mr. Justice Brandeis, namely, "the amount actually paid to establish the utility" (R. I, 174, 300, II, 205-206). It was determined, as he said it should be determined, "by inspection of books and vouchers, and by other direct evidence. If this class of evidence is not complete, it may be necessary to supplement it by evidence as to what was probably paid for some items, by showing prices prevailing for work and materials at the time the same were supplied." (Concurring opinion of Mr. Justice Brandeis in *State of Missouri ex rel. Southwestern Bell Telephone Company v. Public Service Commission of Missouri*, 262 U. S. 276, note at page 295; R. I, 183-189.) To the extent of 94% this original cost was shown by books, vouchers and other direct evidence. 6% was estimated (R. II, 184).

The expenditures included in this $70,000,000 actual cost admittedly showed the original cost substantially as it would have appeared on Hope's books had it kept them from the beginning of operations pursuant to the Federal Power Commission's present Uniform System of Accounts, in accordance with which all annual operating statements submitted in this case were prepared (R. I, 300).

The cost actually recorded in Hope's capital accounts on its books as of the same date, December 31, 1938, was $52,730,000 (Ex. 20, R. I, 197). The difference between these book costs and the original cost is accounted for by property items which under modern systems of accounts are required to be charged to capital but which Hope in times past charged to expense. The largest single item, about $13,000,000, represents the drilling cost of 2633 wells now in use which, prior to the effective date of the West Virginia System of Accounts in 1923, had been charged to

expense (R. I, 349, 353). Hope's book costs thus do not reflect the money actually paid to drill 2633 of the wells now in use and to construct various pipe lines, measuring stations, small buildings, telephone lines and other physical property now in use (R. I, 353).

Hope also introduced a reproduction cost new estimate as of the same date of $97,000,000 (R. III, 206) prepared by a widely experienced engineer. This estimate includes nothing for the cost of developing the business or for going concern value or for the discovery value of the great gas fields developed by Hope (Ex. 16A, R. I, 162). In other words, it includes only the estimated cost of reproducing the physical property with all gas leaseholds included at actual cost.

Hope also introduced a trended original cost which merely substituted in the original cost the 1938 prices of labor and materials in lieu of the prices prevailing at the time the construction was made. This trended original cost is $105,000,000 (Ex. 20, R. I, 193, 197), thus indicating a weighted average increase in price levels of 50% over the original cost of $70,000,000.[1]

The Commission gave no weight to any of this evidence in its finding. It ignored all evidence of the vouchers and other direct proof of the "cost to establish the utility," all evidence of present value, all judicially known facts as to the increase in price levels, and started its rate base cal-

---

[1] In a note to the Commission's petition, No. 890, at page 17, the reproduction cost new estimate of $97,000,000 and the trended original cost of $105,000,000 are contrasted with what is called the "actual legitimate" cost of $52,000,000. The correct comparison is not with $52,000,000 but with $70,000,000. Obviously the $52,000,000 does not include all or part of the cost of many items of property that are included in all of the figures used by Hope. The Public Utilities Commission of Ohio found the reproduction cost new of Hope's physical property as of June 30, 1937 to be $100,257,000, and its then present value to be $66,166,000 (Exs. A and C, p. 99, to Cleveland's "Supplement to Petition and Complaint as Amended," Docket No. G-100).

culation with the book cost of $52,730,000, adjusted for so-called accounting errors to $51,207,000 as of December 31, 1938 and to $51,957,000 as of December 31, 1940 (R. I, 36, 50). From the latter figure it deducted its estimate for accrued depletion and depreciation to arrive at $29,629,000, added allowances for working capital, useful unoperated leaseholds and net capital additions, and arrived at a rate base, for fixing future rates, totaling $33,712,000 (R. I, 50). The same physical property which appears in the Commission's rate base at $29,629,000 was valued for 1941 taxation by the State of West Virginia at over $50,000,000 (R. I, 391-393, Transcript, pp. 5431-5433, all erroneously excluded by the Commission).

The rate bases used as a basis for the Commission's action as to Hope's past rates were similarly determined.

## REASONS FOR DENYING THE WRIT.

It might have been, as the petitioners claim, a matter of great public significance if the Circuit Court of Appeals had approved the Commission's utter disregard of both present value and actual cost in fixing Hope's rates. But it did not. Instead it merely made a particular application of general principles that have repeatedly been applied by this Court.

Separately discussing the five points assigned by the petitioners for inviting review:

### I. The Commission's Right to Use a Prudent Investment Rate Base.

*(No. 890 Pet., pp. 15-19; No. 891 Pet., 11-16.)*

The Circuit Court of Appeals' reasons for its decision are fully set forth in its opinion (R. IV, 172-193) and need no repetition.

We merely call attention to the fact that its holding does not confine the Commission to any single formula or

group of formulas, that it has left the Commission free to reject estimates of reproduction cost and trended original cost or any other single formula, and free to adopt original cost or historical cost "as representing present fair value where under all the circumstances of the case it is not unreasonable to do so" (R. IV, 183-184).

The petitioners claim (No. 890 Pet., p. 15; No. 891 Pet., p. 11) that this case presents the general question of whether the Federal Power Commission "may employ the prudent investment method of rate-making." The plain fact is that the Commission did not use a "prudent investment rate base" or employ the "prudent investment method of rate-making." Its opinion does not claim to have done so. It started its rate base calculation with the approximately $52,000,000 which admittedly did not reflect the actual cost of or even all of the property presently devoted to public service. This figure in the Commission's exhibits is variously called "adjusted book cost" and "original cost" (Ex. 57, R. I, 219, 212; 265-270). In the Commission's opinion it is called "actual legitimate cost or gross plant investment" (R. I, 34-36, 50). Only in the briefs of counsel does it become "prudent investment." Actually these terms are all applied to the same figure, which is merely an incomplete adjusted book cost.

Had the rate base been determined either in accordance with the prudent investment rate-making views of Mr. Justice Brandeis, or in accordance with the practice of the California Commission, the Commission's calculation would have started with a figure of about $70,000,000. Also, and of exceeding importance on the rates fixed, the rate of return would have been based on what Mr. Justice Brandeis called the "necessary cost" of money *at the time it was invested* and not upon conditions controlling the money market at the time the rate order was made (262 U. S., pp. 304-307, 307 note).

What the Commission insisted upon, and what the Circuit Court of Appeals rejected, was the unrestricted right to rest a base calculation on book costs. The Commission also insisted upon the right to use a present low rate of return in combination with these partial past costs, instead of determining the rate of return on the basis of the historical cost of capital at the time it was invested.

It was the results of this rigid bookkeeping method of determining the rate base solely on the way individual books happened to have been kept prior to regulation, without making "pragmatic adjustments"—a method that penalizes conservative accounting of the past by eliminating present property from the rate base; that ignores permanent changes in the value of the dollar and other known facts; that destroys consistency of results in rate regulation; and that requires that utilities shall suffer from inflation and profit from deflation—that were disapproved by the Circuit Court of Appeals.

Nor is it necessary to review this case to assist the Commission and other courts in the disposition of pending cases (No. 890, Pet., pp. 15-16, notes). Few, if any, present natural gas properties are as old as Hope's. It was the pioneer operating company in the Appalachian area. All of the companies referred to in the Commission's petition are in the west and the southwest where the natural gas business has been developed largely in the last twenty years. Certainly it is true of those companies that substantially all, and in most cases all, of the investment in their properties was made after the permanent increase in price levels that occurred as a result of World War I and after the regulation of accounting by various State Commissions. With such companies the disparity between "book cost" and "original cost" and between both and present value are of minor importance compared with other matters entering into rates.

## II. Well Drilling and Other Omitted Property.

*(No. 890 Pet., pp. 19-22.)*

As previously noted, the Commission's application of its rigid bookkeeping formula resulted in the omission from the rate base of all or part of the costs of 2633 wells and other items of physical property now in service. The original cost of this omitted property was approximately $17,000,000. This omission was an automatic result of the Commission's formula due to the fact that prior to regulation Hope charges these costs to operating expense.

The Circuit Court of Appeals merely held that property now devoted to public service must be included in the rate base whether that rate base is measured by value or cost. That in so doing it followed principles long established by this Court and in this respect in conformity with the rate base views of Mr. Justice Brandeis is clear from its opinion (R. IV, 184-189).[2]

Entire omission from the rate base of the value or cost of physical property presently in service was not involved, as the Commission's petition seems to claim, either in *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. 575, or *Railroad Commission of Louisiana v. Cumberland Telephone & Telegraph Company*, 212 U. S. 414. The quotation from the *Natural Gas Pipeline* case (No. 890 Pet., p. 21) refers to the subject of going concern value, where the Court refused to accord that company "the privilege of capitalizing the maintenance cost of excess

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[2] The Circuit Court of Appeals carefully considered and disposed of the arguments made in a footnote in the Commission's petition (No. 890, p. 22) as to the effect of the 1921 rate proceedings before the West Virginia Public Service Commission (which affected only Hope's intrastate rates, then only 4% of its business) and the alleged "recoupment" of well drilling costs from earnings (R. IV, 188). We add only that the alleged earning figures stated in the footnote are grossly misleading, as we pointed out to the Circuit Court of Appeals.

plant capacity" as a measure of such value (315 U. S., pp. 590-591). There was no issue in the present case as to going concern value.

## III. The So-Called "Economic-Service-Life" Principle of Estimating Accrued Depreciation.

*(No. 890 Pet., pp. 22-23.)*

The Circuit Court of Appeals did not condemn the depreciation formulas used by the Commission but, on the contrary, said that they "are undoubtedly important matters for it to take into consideration" (R. IV, 190). But when the blind application of those formulas resulted, for example, in a depreciation of well equipment to 42.4% of its cost whereas its then salvage value, measured by Hope's experience, was 65.2% of its cost, the court properly held the results arbitrary and unreasonable (R. IV, 189). The difficulty with the Commission was that it paid no attention whatever to the salvage history of the Company's equipment or to the testimony of witnesses who had inspected the property and observed its actual condition. It applied its formulas without checking the results against known facts, a procedure which this Court has condemned in numerous cases cited in the opinion of the Circuit Court of Appeals (R. IV, 190-192).[3]

Nor is there anything in the former decisions of this Court to the contrary. Indeed in *Lindheimer v. Illinois Bell Telephone Co.*, 292 U. S. 151, which the Commission's

[3] The argument in a footnote on page 23 of the Commission's petition, No. 890, that the Commission's deduction for accrued depreciation was "some $24,000,000 less" than Hope's book depreciation reserve is factually incorrect (R. I, 86), ignores the Commission's finding that Hope's book depreciation reserve greatly overstated the actual depreciation in its present properties in terms of book cost (R. I, 39-40, 46), and ignores the evidence that Hope's book depreciation reserve is only moderately larger than the accrued depreciation found by Hope's engineers expressed in terms of present value (R. III, 24, 206).

petition claims is contrary, the Court said of estimated annual depreciation charges, page 170:

> "The necessity of checking the results is not questioned. The predictions must meet the controlling test of experience."

## IV. The Determination of Annual Allowances for Depreciation.

*(No. 890 Pet., pp. 23-25.)*

The Circuit Court of Appeals found the Commission's annual depreciation allowance inadequate for exactly the same reasons that it found the rate base inadequate, namely, (1) the allowance was based on book costs of a very old property without any reflection of present value, and (2) it omitted any consideration of property costing $17,000,000 excluded from the rate base. Additionally, the Commission failed to include any depreciation allowance whatsoever for property added by Hope after 1940 and included in the rate base.

That the holdings in these respects are in accordance with the former decisions of this Court, including those with which the Commission's petition claims they are in probable conflict, is made clear in the opinion of the Circuit Court of Appeals (R. IV, 194-196).

## V. The Commission's Power to Adjudge Retroactively the Lawfulness of Hope's Filed Rates.

*(No. 890 Pet., pp. 25-27; No. 891 Pet., pp. 16-21.)*

The Commission claims that the decision of the Circuit Court of Appeals as to the Commission's "Findings as to the Lawfulness of Past Rates" is anomalous (No. 890 Pet., pp. 25-27). The real anomaly is in the Commission's assertion of such clearly undelegated power in this one case at the instance of the City of Cleveland.[1] A similar request by the Pennsylvania Public Utility Commission in these

same proceedings was ignored by the Power Commission (R. II, 20, 22, 24). In no other case before it has the Commission asserted any such retroactive power, although if it exists there has not been an interstate natural gas rate in the country since June 21, 1938, the effective date of the Natural Gas Act, which could not have been, or which cannot now, or 20 years from now, be adjudged "unlawful" and in violation of the Act. Even the *Natural Gas Pipe Line* case (No. 890 Pet., p. 15) is still open for such action for the period June 21, 1938 to September 1, 1940, the date the rate reduction prescribed by the Commission's interim order became effective (315 U. S., p. 580). The existence of any such retroactive power, except under legislatively prescribed safeguards, would be wholly anomalous and the Circuit Court of Appeals was clearly correct in holding that "such power cannot be spelled out of the statutes on any theory of interpretation with which we are familiar" (R. IV, 200).

Cleveland claims (No. 891 Pet., pp. 18-21) that the decision of the Circuit Court of Appeals in this case is in conflict with the following decisions of this Court: *Arizona Grocery v. Atchison Railway*, 284 U. S. 370; *Atlantic Coast*

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[1] The pending proceedings before the Public Utilities Commission of Ohio referred to by Cleveland (No. 891 Pet., p. 17) constitute an attempt by Cleveland to enforce beyond June 30, 1939 an ordinance rate which was held grossly confiscatory by that Commission in 1939 and by the Supreme Court of Ohio in 1940. *East Ohio Gas Company v. City of Cleveland*, 27 P. U. R. (N. S.) 387 (1939); *The East Ohio Gas Company v. Public Utilities Commission of Ohio, City of Cleveland v. Public Utilities Commission* (2 cases), 137 O. S. 225, 28 N. E. (2d) 599 (1940). Cleveland's claim that its consumers will be entitled to a $3,600,000 refund under the pending proceedings is merely a claim and nothing more. The rate presently collected in Cleveland under bond is the rate fixed by the Ohio Commission in 1939 and approved by the Ohio Supreme Court in 1940 in the cases cited. This rate in Cleveland and the rate of The Peoples Natural Gas Company in Pittsburgh are the lowest natural gas rates in effect in any of the 25 largest cities in the United States (Ex. 25, p. 5; Ex. 50, Table 1).

*Line Railroad Company v. Florida*, 295 U. S. 301; and *United States v. Morgan*, 307 U. S. 183. As to these cases we point out:

(1) In none was there any consideration of the lawfulness of a filed rate schedule prior to the effective date of a regulatory body's first order fixing rates for the future.

(2) The regulatory bodies involved were given by the statutes creating them power to make reparations, a power not included in the Natural Gas Act.

(3) The sole issue in the *Arizona Grocery* case was whether the Interstate Commerce Commission, after an order fixing a rate, could later order reparations of moneys collected under that rate upon a subsequent finding that the rate originally fixed was too high. The issue in the *Atlantic Coast Line* case was whether a court of equity could refuse restitution to shippers of increased rates collected by carriers under an order of the Interstate Commerce Commission which had been set aside solely for procedural defects. The issue in the *Morgan* case was whether a court of equity having control of a fund impounded with it could distribute that fund in accordance with subsequent findings of the Secretary of Agriculture, which findings however did not antedate the first order he made and on suspension of which the Court had ordered the fund impounded.

The Circuit Court of Appeals' decision on this point is supported by the recent decision of this Court in *Public Utilities Commission of Ohio v. United Fuel Gas Co.*, 317 U. S. 456. The only specific provision as to the power of the Commission to fix rates in the Natural Gas Act is that when it finds existing rates unreasonable it may fix the rate "to be thereafter" collected (No. 890 Pet., Appendix, p. 30). This is also the provision of the Ohio Public Utility Act considered in the case last cited. Construing this provision the Court said, page 464:

"If, after such hearing, the Commission finds that the rate or charge is unjust, unreasonable, or otherwise unlawful, it must 'fix and determine the just and reasonable rate, fare, charge, toll, rental or service *to be thereafter* rendered, charged, demanded, exacted or collected for the performance or rendition of the service, and order the same substituted therefor.' § 614-23 (italics added). The statute in terms thus gives the Commission power to prescribe such rates prospectively only. If, after notice and hearing, the Commission finds rates to be unlawful, it can then fix the just and reasonable rates 'to be thereafter' charged. The establishment of new rates must be preceded by a finding that the old rates are unjust and unreasonable, and the new rates are prospective as of the date they are fixed. There is no basis in the statute for concluding that the Commission's orders can be retroactive to the date when the Commission's inquiry into the rates was begun; on the contrary, the explicit language of the statute precludes such a construction."

The Commission's excursion beyond its statutory rate-making powers in the present case was properly curbed by the Circuit Court of Appeals and it is not necessary to add the authority of this Court to prevent further excursions. Indeed, the Commission has restrained itself in all cases but this.

## CONCLUSION.

For the foregoing reasons it is respectfully submitted that the petitions for a writ of certiorari should be denied.

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*Attorneys for Hope Natural Gas Company.*

May 4, 1943.

FILE COPY

# In the Supreme Court of the United States

**OCTOBER TERM, 1943.**

FEDERAL POWER COMMISSION, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONERS,

vs.

HOPE NATURAL GAS COMPANY.

**No. 34**

CITY OF CLEVELAND,

*Petitioner,*

vs.

HOPE NATURAL GAS COMPANY,

*Respondent.*

**No. 35**

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT.

## BRIEF ON BEHALF OF HOPE NATURAL GAS COMPANY.

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*All italics by way of emphasis in this brief are ours unless otherwise noted.*

# In the Supreme Court of the United States

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HOPE NATURAL GAS COMPANY,

*Respondent.*

**No. 35**

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT.

## BRIEF ON BEHALF OF HOPE NATURAL GAS COMPANY.

Both of the above cases arise out of the same proceedings below and we therefore file one brief.

## OPINIONS BELOW.

The opinion of the Circuit Court of Appeals for the Fourth Circuit (R. IV, 169-207[1]) is officially reported in 134 F. (2d) 287. The opinion of the Federal Power Commission (R. I, 16-89) is reported in 44 P. U. R. (N. S.) 1.

[1] In the record citations, roman numerals refer to the volume and arabic numerals to the page.

## JURISDICTION.

The judgment of the Circuit Court of Appeals was entered on February 16, 1943 (R. IV, 207). The petitions for a writ of certiorari were filed on April 6, 1943, and were granted on May 17, 1943 (R. IV, 209, 210). The jurisdiction of this Court is invoked under Section 240(a) of the Judicial Code as amended by the Act of February 13, 1925 (28 U. S. C. § 347), and Section 19(b) of the Natural Gas Act (15 U. S. C. § 717r).

## QUESTIONS PRESENTED.

*(Com. Brief, 2-4; Cleve. Brief, 7-8)*[2]

There are only two ultimate questions in this case. The first is whether the court below properly set aside the reduced rates prescribed by the Commission's findings and order because they are "too low" (*Federal Power Commission v. Natural Gas Pipeline Company of America*, 315 U. S. 575, 585). The second is whether the court below also properly set aside the Commission's retroactive findings as to the lawfulness of past rates because they are not "within the ambit" of the Commission's statutory authority (315 U. S., 586). These two questions are stated by the petitioners as Nos. 7, 8 and 9.

All other questions are subsidiary to the first. Whether the rates are too low depends upon a proper determination of rate base, operating expenses and rate of return. Petitioners state some of these subsidiary issues in their questions Nos. 1 through 6, but only those as to which they believe the court below erred.

The court below properly set aside the Commission's rate action if "as applied to the facts before it and viewed in its entirety" it produced an "arbitrary result" (315 U.

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[2] These abbreviations refer to the Brief for Petitioners in No. 34 and the Brief of Petitioner in No. 35, respectively. The references thereto under the headings of this brief show where the petitioners discuss the respective subjects here discussed.

S., 586). Accordingly it is necessary to discuss, as we do in this brief, not only the subsidiary questions mentioned by the petitioners, but also the several determinations by the court below supporting its final judgment which are not here challenged by the petitioners and the several other important grounds upon which that judgment can properly rest.

We can not accept the statement in the Commission's brief (p. 2) that the Commission used a "prudent investment" rate base and the resulting implication that it used a prudent investment method of rate making. As we point out in this brief, it used a rate base and method of rate making which viewed in their entirety are arbitrary and unreasonable and produced too low a rate whether tested by the fair value method, or by the prudent investment method, or by any other general standard of reasonableness.

## STATEMENT.

*(Com. Brief, 4-15; Cleve. Brief, 9-19)*

We supplement the statements made in the petitioners' briefs as follows:

### 1. Hope's Business and Properties.

Hope was organized in 1898 under West Virginia laws. Its business is now, and always its principal business has been, the production, purchase, transmission and marketing of natural gas in that state (Ex. 4, R. I, 107-111). The division of its annual sales between local sales in West Virginia and sales of gas exported from West Virginia is indicated in the following table in thousands of cubic feet, abbreviated as M.c.f. (Ex. 2, 2; Ex. 2B, 3[3]):

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[3] In accordance with Rule 10 of the Circuit Court of Appeals for the Fourth Circuit the parties below printed as supplements or appendices to their briefs only such parts of the record as they

*(Continued on next page)*

**Hope's Annual Gas Sales—M.c.f.**

| | 1937 | 1938 | 1939 | 1940* |
|---|---|---|---|---|
| Total Local Sales of Gas in West Virginia | 11,428,353 | 8,632,673 | 9,732,983 | 11,320,325 |
| Export Gas Sales: | | | | |
| To East Ohio | 35,074,416 | 30,316,773 | 33,907,672 | 40,376,091 |
| To Peoples | 3,506,013 | 2,870,545 | 3,864,104 | 9,738,612 |
| To River | 330,644 | 222,615 | 237,640 | 391,859 |
| To Fayette | 849,305 | 837,986 | 840,398 | 859,106 |
| To Manufacturers | 4,523,967 | 3,995,563 | 2,500,755 | 2,241,684 |
| Total Export Gas Sales | 44,284,345 | 38,243,482 | 41,350,569 | 53,607,352 |
| Total Gas Sales | 55,712,698 | 46,876,155 | 51,083,552 | 64,927,677 |

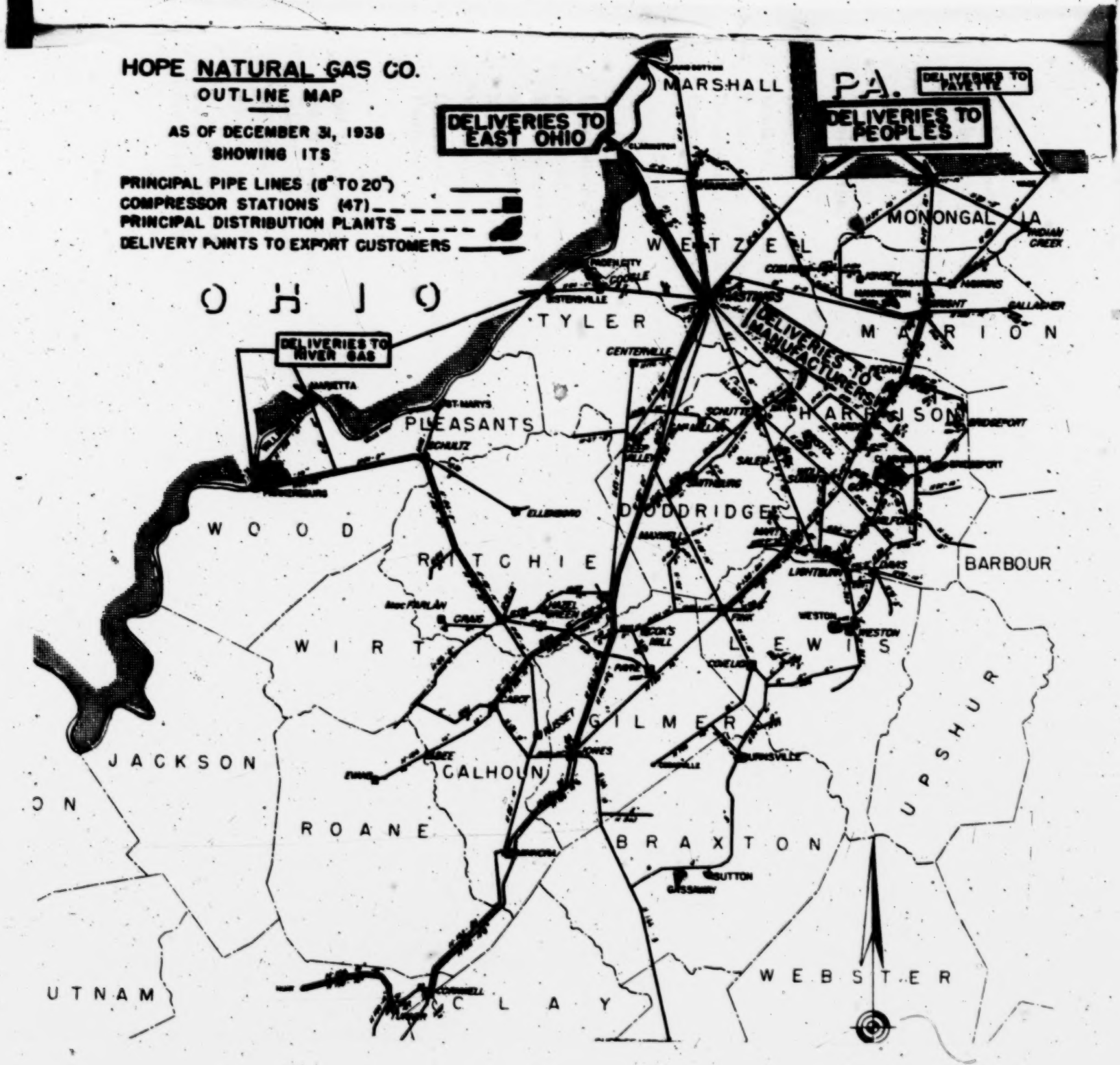
* Excluding sales from former Reserve Gas Company properties, see *infra*, p. 19.

All five of the export customer companies receive delivery of gas at or near the northern West Virginia state line. The East Ohio Gas Company, The Peoples Natural Gas Company and The River Gas Company, like Hope, are subsidiaries of Standard Oil Company (New Jersey). Fayette County Gas Company and The Manufacturers Light and Heat Company are not. The names of these companies are hereinafter abbreviated as in the foregoing table.

East Ohio distributes the gas purchased from Hope in the northern and eastern parts of Ohio—Cleveland, Akron, Canton, Massillon and Youngstown being the principal cities. River distributes in Marietta, Ohio, but the sales to it are insignificant and since the rates to it were not affected by the Commission's orders no further reference to it will be made. Peoples, Fayette and Manufacturers distribute the gas purchased from Hope in various communities in Pennsylvania, of which Pittsburgh, served in

(*Continued from preceding page*)

desired the court to read. R. I, II and III as prepared for this Court contain only this matter printed below. Where an exhibit is referred to in this brief and not followed by a reference to the printed volumes in this Court, it will be found in the certified copy of the transcript. Pages of the oral testimony in the original transcript which have not been printed in R. I, II and III are referred to as "Tr."


HOPE NATURAL GAS CO.
OUTLINE MAP
AS OF DECEMBER 31, 1938
SHOWING ITS
PRINCIPAL PIPE LINES (6" TO 20")
COMPRESSOR STATIONS (47)
PRINCIPAL DISTRIBUTION PLANTS
DELIVERY POINTS TO EXPORT CUSTOMERS
DELIVERIES TO EAST OHIO
DELIVERIES TO PEOPLES
DELIVERIES TO PAYETTE
DELIVERIES TO RIVER GAS
DELIVERIES TO MANUFACTURERS
MARSHALL
PA.
MONONGALIA
WETZEL
MARION
HARRISON
TYLER
PLEASANTS
DODDRIDGE
WOOD
RITCHIE
BARBOUR
WIRT
LEWIS
GILMER
JACKSON
CALHOUN
UPSHUR
ROANE
BRAXTON
WEBSTER
CLAY
OHIO




(FROM EXHIBITS Nos. I and IA)

part by Peoples, is the largest. All of the purchasing companies have local and other supplies of gas. The domestic and commercial consumers on the Hope-East Ohio-Peoples systems totaled almost 710,000 in 1940. (Ex. 4, R. I, 118-126; Ex. 2B, 4).

Between pages 4 and 5 of this brief appears a map showing Hope's principal pipe lines, compressor stations and delivery points to its export customers, taken from Exs. 1 and 1A appearing at R. III, opposite 33. The thousands of small gathering lines and the extensive gas producing fields are not indicated on this map. An idea of the extent of Hope's properties can be gained from the following statistics for 1938 (Ex. 2, 1, 3A; Ex. 4, R. I, 110-111):

| | Total Mileage | 3 Inch Equivalent Mileage[4] |
|---|---|---|
| Field and Transmission Lines | 4,024 | 9,545 |
| Distribution Lines | 892 | 929 |
| Number of Compressor Stations | 47 Stations | |
| Total Compressor Station Horsepower | 93,470 Horsepower | |
| Number of Gas Wells Owned | 3,302 Wells | |
| Number of Vendors' Gas Wells | 12,600 Wells | |
| Number of Gas Purchase Contracts | 340 Contracts | |
| Operated Leasehold Acreage Owned | 337,790 Acres | |
| Unoperated Leasehold Acreage Owned | 647,180 Acres | |

A full description of Hope's properties, their history and their method of operation as testified to by Mr. Tonkin, Hope's President, is contained in Exhibit 4 and related exhibits, important parts of which are printed at R. I, 103-142.

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[4] Mileage of pipe of all sizes expressed in terms of equivalent amount of pipe of 3" diameter, for instance 1 mile of 6" pipe being equivalent to 2 miles of 3" pipe.

**2. Hope's Rate History.**

Because of constant reiteration by petitioners to the effect that Hope has "recouped" a large part of the cost of its properties from the public (Com. Brief, 3, 18, 71, 74, 78-85; Cleve. Brief, 8, 20, 40, 42, 44, 53) it is necessary to say something about the rate history of Hope and of its largest customer, East Ohio. Both companies were organized in 1898 by the same interests, the one to be primarily a producing company in West Virginia and the other to be a distributing company in Ohio (Ex. 4, R. I, 123). Gas rates in Ohio in 1898, as now, were fixed by ordinances passed by municipal councils. If these ordinances were accepted by the utility they became a contract for the period fixed in the ordinance not exceeding ten years. (Ohio General Code, Sections 3982, 3983). After the passage of the Ohio Public Service Commission Act in 1911 a utility dissatisfied with an ordinance rate had the right to appeal to The Public Utilities Commission from the rates fixed by Council (Ohio General Code, Sections 614-44 *et seq.*).

In 1898 East Ohio procured its first franchise from the City of Akron. The ordinance granting this franchise provided a rate of 25¢ per M.c.f. for the first 5 years and 30¢ for the succeeding 5 years. This ordinance was accepted by East Ohio and fixed the rate up to 1908. *The East Ohio Gas Company v. The City of Akron*, 81 O. S. 33, 90 N. E. 40 (1909).

In 1902 East Ohio accepted a franchise from the City of Cleveland which fixed a rate of 30¢ per M.c.f. for a period of 10 years. In 1911 a new ordinance was passed by Cleveland and accepted by East Ohio continuing the rate of 30¢ per M.c.f. for 8 years and increasing it to 35¢ per M.c.f. for the last two years. This ordinance by its terms expired February 6, 1921. *State ex rel. The City of Cleveland v. Court of Appeals*, 104 O. S. 96, 135 N. E. 377 (1922).

The rate charged by Hope to East Ohio prior to 1910 does not appear from the record or decided cases. Ex-

hibit 5 shows that beginning March 1, 1910 the rate for gas furnished by Hope to East Ohio was fixed at 50% of the amount paid by East Ohio's domestic consumers, provided that this should not be less than 15¢ per M.c.f. prior to May 31, 1918 and not less than 17½¢ for 2 years thereafter. It thus directly reflected the terms of the Cleveland ordinance.

Thus until the early 1920's East Ohio's rates were fixed by contract for periods of ten years in advance and Hope's rates to East Ohio were similarly fixed. Following the large depletion of Hope's fields by World War I and the increased costs of operation that occurred after that period, Hope's rates to East Ohio and East Ohio's rates in Cleveland were substantially increased to approximately present levels as a result of the litigation reported in the case last above cited (Ex. 5, 24).

In 1931 Cleveland passed an ordinance reducing East Ohio's rates which, on appeal, the Ohio Commission sustained. *East Ohio Gas Company v. City of Cleveland*, 4 P. U. R. (N. S.) 433 (1934). Hope agreed to absorb a part of this rate reduction and reduced its net rate to East Ohio to 38.5¢ (Ex. 5, 24). In 1937 a provision for a discount on gas purchased by East Ohio for resale to large industrial consumers in order to enable East Ohio to sell industrial gas in competition with other fuels reduced Hope's average rate to East Ohio to 36.5¢ (Ex. 5, 28).

Since 1937 to the effective date of the Commission's rate reducing order the average rates collected by Hope from its export business were as follows (Ex. 11, 5; Ex. 37, 17, 45):

| From | Per M.c.f. |
|---|---|
| East Ohio | 36.5¢ |
| Peoples | 35.5¢ |
| River | 35.0¢ |
| Fayette | 31.5¢ |
| Manufacturers | 31.5¢ |
| Average | 35.9¢ |

Differences in the terms and conditions of these various contracts accounting for the differences in prices were fully explained by Mr. Tonkin (Ex. 4, R. I, 112-118).

These export rates have enabled Peoples in Pittsburgh and East Ohio in Cleveland to maintain the lowest domestic natural gas rates in force in any of the 25 largest cities in the United States (Ex. 25, 5; Ex. 50, Table 1).[5]

Nevertheless the Cities of Cleveland and Akron, Ohio, petitioners herein, have attempted to secure still lower rates. In 1932 Akron and in 1937 Cleveland passed rate ordinances prescribing lower rates for East Ohio than those then in force. These being appealed to the Ohio Commission it, among other matters, investigated Hope's interstate rates to East Ohio in great detail and in both cases sustained them as reasonable. Its findings in these respects were substantially sustained by the Ohio Supreme Court in the *Akron* case and completely sustained by that court in the more recent *Cleveland* case. *Akron* case—*Re East Ohio Gas Company*, 17 P. U. R. (N. S.) 433 (1937);

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[5] These exhibits show the following monthly bills, for 16 of the 25 largest cities, resulting from the normal use of natural gas amounting to 37 therms for cooking, water heating and refrigeration. The remainder of the 25 largest cities have manufactured gas at substantially higher rates.

| | Monthly Bill |
|---|---|
| Pittsburgh, Pa. | $1.93 |
| Cleveland, Ohio | 2.47 |
| Louisville, Ky. | 2.50 |
| San Francisco, Calif. | 2.51 |
| Los Angeles, Calif. | 2.52 |
| Buffalo, N. Y. | 2.67 (Mixed Gas) |
| Houston, Texas | 2.91 |
| Cincinnati, Ohio | 2.92 (Mixed Gas) |
| Kansas City, Mo. | 3.51 |
| New Orleans, La. | 3.72 |
| Denver, Colo. | 4.11 |
| Detroit, Mich. | 4.24 |
| Washington, D. C. | 4.72 (Mixed gas) |
| St. Louis, Mo. | 4.97 (Mixed Gas) |
| Minneapolis, Minn. | 5.07 (Mixed Gas) |
| Chicago, Ill. | 5.46 (Mixed Gas) |

*The East Ohio Gas Company v. The Public Utilities Commission of Ohio, etc.*, 133 O. S. 212, 12 N. E. (2d) 765 (1938). *Cleveland* case—*East Ohio Gas Company v. City of Cleveland*, 27 P. U. R. (N. S.) 387 (1939); *The East Ohio Gas Co. v. Public Utilities Commission of Ohio, City of Cleveland v. Public Utilities Commission (2 cases)*; 137 O. S. 225, 28 N. E. (2d) 599 (1940); see Exhibits A and C to Cleveland's "Supplement to Petition and Complaint as Amended" filed in Docket No. G-100 herein on March 10, 1939.

While, therefore, Hope's export rates have never been directly subject to regulation, nevertheless their reasonableness was before the Ohio courts in 1921 and before the Ohio Commission and courts in 1931, 1932, 1937 and now again since 1939. In all of these cases the investigations by these bodies of Hope's properties and operations were as complete as in the case of East Ohio.

The *East Ohio-Cleveland* cases presently pending before the Ohio Commission, frequently referred to in Cleveland's brief (pp. 2, 13, 63) and the Commission's brief (pp. 8, 110-111), arose out of the fact that effective July 1, 1939 Cleveland passed a new ordinance fixing precisely the same rate for natural gas in Cleveland that the Ohio Commission had declared in its order of January 10, 1939 was 13¢ per M.c.f. too low, a holding that was sustained by the Ohio Supreme Court in the last *Cleveland* case above cited.

**3. Hope's Financial History.**

The repeated statement in the Commission's brief that "the average annual yield on the average annual amount of Hope's capital stock issued for cash or other assets has exceeded 20%" (Com. Brief, 5, 26), is mathematically correct, but wholly misrepresents the true picture. This computation ignores these facts: Hope paid no dividends for the first ten years of its history and put all of its earnings back into the development of its property (Ex. 81, R. III,

13). In that development it was assisted by an associated company that at one time advanced as much as $6,265,000 on open account to enable Hope to make this development (Ex. 81, R. III, 16). Thus the total capital stock issued for the first ten years of Hope's history was only $500,000 although by the end of that time, with advances and earnings put back, it had fixed assets of more than $10,000,000 (Ex. 81, R. III, 16). In 1908 these advances were liquidated when Standard Oil Company purchased $4,500,000 additional stock for cash and at the same time a $5,000,000 stock dividend was declared (Ex. 81, R. III, 13). In any realistic view this stock dividend, representing ten years of earnings on cash capital and cash advances which earnings were reinvested in the business, was issued for cash although the Commission did not so treat it in this computation.

Thus the average annual amount of Hope's capital stock formally issued for cash ($11,328,133 per Ex. 81, R. III, 15, note) is not in any sense a fair base upon which to predicate a percentum of either earnings or yield. In addition, the 20% computation includes in the earnings out of which dividends were paid almost $40,000,000 of net earnings that came from sources other than Hope's natural gas service (Ex. 81, R. III, opp. 17, cols. (c), (k) and (l)).

A more accurate measure of Hope's financial history so far as it has any bearing on rates is, we suggest, its history beginning with 1926.

During the first two decades of its existence Hope had available to it the flush production from the theretofore untapped gas fields of northern West Virginia. It sold enormous quantities of gas at low costs and low prices. A large part of these low cost sales were for industrial, field and other uses of a wholly non-utility character. In the period from 1904 to 1909 its sales ranged from slightly less than 31 million M.c.f. to about 45 million M.c.f. From that time until 1916 its sales were never less than 64 million M.c.f. and in many years larger. In 1916, 1917 and 1918 it

was forced to meet enormous demands upon its system occasioned by World War I, its sales in 1916 being over 102 million M.c.f. (Ex. 2, 2). During this period Hope's earnings steadily increased, reaching $5,221,000 in 1916 (Ex. 81, R. III, opp. 17, col. (j)).

During this period Hope met these demands largely from its own producing fields. As a result of this World War I depletion of its gas reserves Hope was required to extend its system southward after the war even in the face of greatly declining demands. Finally in 1925 it built a long transmission line to southern West Virginia where it could procure additional supplies from producers who had theretofore engaged in the manufacture of carbon black. (Ex. 4, 55-61; Ex. 3A). 1926 was thus the first year of full operation of this extended property and of Hope's greater dependence upon purchased gas.

Since 1925 Hope's sales, revenues and earnings have fluctuated widely each year, depending upon winter weather conditions, industrial activity, the extent of local gas supplies available to its customer companies in Ohio and Pennsylvania, the extent to which it was called upon to meet winter loads from its own gas reserves and other factors (Ex. 4, 61-65).

The following table summarizes its operations:

| Year. | Fixed Assets Per Books[4] | Hope's Total Sales Per Books | | Depreciation and Depletion Per Books[9] | Hope Net Operating Gas Income Per Books[10] | Col. (5 |
|---|---|---|---|---|---|---|
| | | M.c.f.[7] | Revenue[8] | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | |
| | | | (Thousands Omitted) | | | |
| 1926 | $ 47,164 | 57,156 | $ 20,662 | $ 2,872 | $ 3,479 | $ |
| 1927 | 48,762 | 52,433 | 19,363 | 2,809 | 1,535 | |
| 1928 | 48,548 | 55,081 | 20,635 | 2,651 | 2,393 | |
| 1929 | 52,193 | 57,444 | 22,048 | 2,660 | 3,234 | |
| 1930 | 53,009 | 52,649 | 19,931 | 2,677 | 1,188 | |
| 1931 | 52,779 | 47,725 | 17,993 | 2,560 | 699 | |
| 1932 | 52,412 | 37,702 | 14,206 | 2,329 | (805) Loss | |
| 1933 | 52,191 | 37,080 | 14,121 | 1,998 | 366 | |
| 1934 | 54,454 | 43,535 | 15,986 | 1,693 | 1,041 | |
| 1935 | 54,312 | 47,133 | 16,976 | 1,846 | 2,279 | |
| 1936 | 56,106 | 55,679 | 20,139 | 2,013 | 3,555 | |
| 1937 | 56,536 | 58,911 | 20,366 | 1,982 | 2,368 | |
| 1938 | 56,650 | 47,921 | 16,942 | 4,663 | 872 | |
| 1939 | 64,251 | 51,344 | 18,119 | 1,218 | 2,283 | |
| 1940 | 65,193 | 69,056 | 24,362 | 1,464 | 5,337 | |
| Total | $814,560 | 770,849 | $281,849 | $32,435 | $29,824 | $ |
| Average | $ 54,304 | 51,390 | $ 18,790 | $ 2,162 | $ 1,988 | $ |

[4] From Ex. 81, R. III, 16, Col. (b). Fixed Assets for 1939 and 1940 include former Reserve Gas Company properties. Other columns include operations of former Reserve Gas Company only.

[7] From Ex. 2, 2 and 2B, 3, R. III, 307.

[8] From Ex. 81, R. III, opp. 17, Col. (b).

[9] From Ex. 81, R. III, opp. 17, Col. (h).

[10] From Ex. 81, R. III, opp. 17, Col. (j).

The figures above include Hope's distribution business, as do all general financial figures used by the Commission. In column (2) is given the fixed assets relating to the natural gas business which average over $54 million. Column (7) represents the net operating gas income before any deduction for depreciation and depletion and averages $4.1 million per annum. In examining Hope's book figures it is necessary to show the combined earnings available for return, depreciation and depletion because of Hope's depreciation policy. That policy was never an attempt to provide for merely the annual depreciation and depletion of the property. Hope's Treasurer, Mr. Chisler, explained that the amounts annually set aside were determined by ascertaining the amount of money needed for current property replacements and the additional amounts which it was

deemed advisable to reserve from earnings to pay for needed improvements (Chisler, R. II, 399-400). As Mr. Chisler said:

> "Well, the whole plan was to keep enough money from revenues, from earnings, to develop the property with." (R. II, 399.)

This policy, of course, explains Hope's large depreciation reserves and its low capitalization. It was a conservative policy that harmed no one and kept available money to make replacements at current price levels and necessary extensions.

Taking these fifteen years Hope's total operating gas income available for return, depreciation and depletion of $4.1 million on fixed assets which we know from this record were substantially understated on the books at $54 million cannot be distorted into a showing of excessive or even adequate earnings.

**4. Proceedings Before the Commission.**

In addition to the parties referred to in the petitioners' briefs, the State of West Virginia and The Public Service Commission of West Virginia were permitted to intervene in the consolidated proceedings before the Commission by order dated April 2, 1940 and the City of Toledo, Ohio, was permitted to intervene in the investigatory proceedings by order dated May 28, 1940. The State of West Virginia subsequently filed a brief opposing the recommendations of the Commission's Staff as being contrary to the interests of West Virginia in tax revenues from utility property and in the securing of reasonable prices for the production and sale for export of an irreplaceable West Virginia natural resource.

The hearings referred to were before a Trial Examiner, and not before the Commission itself.[11]

Hope, being required by the Commission to proceed first with its testimony (R. II, 36), presented all of the evidence which this Court has heretofore held relevant for rate-making purposes and rate base determinations—data as to the dates of the construction of its property and as to changes in price levels, book cost, original cost, reproduction cost and the accrued depreciation in its properties, as well as data on operating expenses for 1937 through 1940 and on rate of return.

The complainants, Cleveland, Akron and the Pennsylvania Public Utility Commission, presented no evidence on rate base or anything else.

The Commission's Staff presented no evidence as to the present value of Hope's properties, but introduced figures showing a rate base consisting of an adjusted book cost of Hope's properties, less a recomputed depreciation

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[11] Hope's application to the Commission for a copy of the Examiner's report in order that it might be apprised of the Government's claims and file exceptions and objections to the report was denied (Order, October 3, 1941). The Commission failed to include the Examiner's report in the certified transcript of the record which it filed with the Circuit Court of Appeals, although inclusion of the report was specifically requested by Hope (Petition for Review, R. IV, 12). In view of the scope of the exhibits and the length of the hearings before the Trial Examiner this case was peculiarly one where the Commission should have followed the practice as to Examiner's reports recommended to insure a fair hearing in *Morgan vs. United States*, 298 U. S. 468, 304 U. S. 1. All other important federal regulatory bodies follow this practice: *Bituminous Coal Division, Department of Interior* (Rule XXIV); *Civil Aeronautics Board* (Rule 5); *Federal Communications Commission* (Commission's proposed findings served on all parties, Rule 1.231 (f) and (g)); *Federal Trade Commission* (Rules XX and XXI); *Food and Drug Administration, Federal Security Agency* (Proposed order issued, Rules of Practice, Sec. 2.712); *Interstate Commerce Commission* (Rules 95 and 96); *National Labor Relations Board* (Rules, Art. II, Secs. 32 and 33); *Public Contracts Division, Department of Labor* (Rules, Part I, Secs. IX and X); *Railroad Retirement Board* (Regulations, Sec. 250.15); *Securities and Exchange Commission* (Rules IX and X).

reserve, plus unoperated leases at book cost, and working capital. It also introduced data as to Hope's operating expenses and statistical data as to rate of return.

A complete list of the exhibits presented by Hope and by the Commission's Staff, classified by subject matter, appears at R. I, 91-101.

Since the true nature and effect of the Commission's determinations can be understood only in the light of the evidence which was before it when it rendered its Opinion and made its rate order, we later summarize this evidence and the Commission's determinations thereon under our discussion of rate base, operating expenses and other factors requiring determination in fixing rates.

## SUMMARY OF ARGUMENT.

The judgment of the Circuit Court of Appeals reversing the Commission's orders in this case should be affirmed for the following among other reasons:

### I.

### RATE BASE.

The Commission began its rate base calculations with a figure more than $17 million below the original cost of Hope's interstate properties here involved. This it did by erroneously considering as "original cost" and "actual legitimate cost" under the Natural Gas Act not the amount of money actually spent by Hope in the construction of those properties, which amount was not in dispute, but only such parts of those amounts as Hope had at the time capitalized on its books under its varying accounting practices of the past. As a result the Commission here fixed a rate base on accounting principles inconsistent with those applied by it in determining annual operating expenses and inconsistent with a proper construction of the term "original cost" as that term is used in the Natural Gas Act and as it is defined in the Commission's Uniform System of

Accounts. Thus it eliminated from the rate base a large part or all of the original cost of some 2600 wells and many other items of physical property now used in rendering public service. There is no justification for this elimination either in theory or in the facts pertaining to Hope's past rate history. It constitutes arbitrary retroactive regulation.

Hope's existing interstate properties were built over a 43-year period commencing in 1898 with half of them built prior to World War I at price levels approximately one-half of those since prevailing. By beginning its rate base calculations with these ancient, partial book costs the Commission disregarded the known, proved and great changes in price levels that have occurred since 1898. Thus its rate base admittedly does not reflect by any amount the change in general price levels since 1898, in the purchasing power of the dollar, or present value by any standard of measurement.

From partial past costs of Hope's properties the Commission deducted a recalculated depreciation reserve which on many substantial items of property left in the rate base, less than their present salvage value and otherwise greatly overstated the amount of accrued depreciation existing in fact.

The rate base so fixed is too low under the Natural Gas Act and under the Constitution. Both protect Hope's existing property to the extent of not permitting the Commission to compel its consumption and use at less than a fair return on its present value, and properly so. The Commission's rate base and rate making method here applied further fail to meet the prudent investment or any other standard of reasonableness. They are not supported by reason or experience and are arbitrary and invalid.

## II.

## OPERATING EXPENSES.

The Commission reduced or eliminated substantial portions of Hope's necessary operating expenses. It failed to allow any annual depreciation upon the properties which it omitted from its rate base and upon properties in service in 1942 which Hope had added to its plant since 1940. On other properties it substantially understated Hope's necessary depreciation expenses by calculating its allowances on past book cost rather than upon the present value of the properties in service. Thus it refused Hope the money necessary to maintain its plant under present price levels. In allocating cost the Commission allowed Hope a wholly inadequate return upon its West Virginia distribution properties. It eliminated Hope's actual expenditures for a deep test well which proved dry. It reduced Hope's expenses by crediting against them substantially all of the earnings from the gasoline and butane business of an affiliated company without adequate allowance to that company for return on its property. Finally, the Commission eliminated millions of dollars of federal income taxes actually paid by Hope in determining past rates and allowed a wholly inadequate amount of federal income taxes in determining future rates.

## III.

## RATE OF RETURN.

The Commission arbitrarily applied a low present rate of return to its past cost rate base. This combination of ancient cost in the rate base with a present day rate of return is not in accordance with the prudent investment principle of rate making and in any view is unreasonable. The rates of return applicable to the past periods when Hope's properties were being built were shown in the record and the Commission arbitrarily and unreasonably refused to apply them to its past cost rate base.

## IV.

## VIEWED IN THEIR ENTIRETY THE RATES FIXED BY THE COMMISSION ARE TOO LOW BY ANY STANDARD.

The rates fixed by the Commission are substantially too low on either the present value or the prudent investment method of rate making. They allow Hope less than 4% on any minimum estimate of present value. On the prudent investment basis they allow Hope less than 5% for both return and annual depreciation and depletion. That the rates are too low is shown additionally by the fact that they assume that Hope can continue indefinitely to furnish large quantities of gas to meet present abnormal demands at a delivered cost of 9¢ per M.c.f., whereas the average price which Hope must pay for purchased gas in West Virginia is 18¢ per M.c.f. The Commission's rates cannot be justified on the ground that Hope's financial record in the past has been successful, or on any other ground. Hope's recent experience attempted to be added to the record at this time indicates that even upon the Commission's own rate making theories the reduction which it ordered is excessive.

## V.

## THE COMMISSION'S FINDINGS AS TO LAWFULNESS OF PAST RATES.

The Commission's retroactive determination of rates for the three and a half year period prior to the effective date of its order fixing rates for the future is beyond its authority. The Natural Gas Act authorizes it to fix only future rates "to be thereafter observed and in force" (15 U. S. C. 717d (a)). It contains no authority to order reparations or to make retroative determinations. These retroactive findings are based upon the same formulas applied in fixing future rates and are therefore invalid. Additionally, they retroactively judge the reasonableness of past rates each year by hindsight instead of by foresight and thus impose an arbitrary and unreasonable standard of conduct.

# ARGUMENT.

## I. RATE BASE.

*(Com. Brief, 33-99; Cleve. Brief, 28-52)*

### A. SUMMARY OF THE EVIDENCE AND THE COMMISSION'S DETERMINATIONS.

#### 1. Costs New.

Originally both parties introduced evidence as to rate base as of December 31, 1938. Thereafter such evidence was brought down to various later dates. Because all of the original exhibits develop figures as of December 31, 1938 we shall use these figures hereinafter unless the text otherwise indicates.

In submitting evidence of the rate base for the interstate business both parties excluded all distribution property and likewise excluded certain property used to carry coke oven gas used as fuel in Hope's compressor stations. For 1940 by stipulation of the parties the properties, revenues and operations of the former Reserve Gas Company, a subsidiary of Hope whose properties and business Hope acquired by merger on December 30, 1939, were excluded (Stipulation, Ex. 77; Tonkin, Tr. 302). It will be understood that all figures hereafter used referring to rate base exclude all of these items.

The items which entered into the interstate rate base were these:

(1) The physical properties, including production system, transmission system and general property;

(2) Operated leaseholds;

(3) Useful unoperated leaseholds;

(4) Working capital; and

(5) Capital additions after 1940.

Items (4) and (5) were the subject of separate allowance and figures for them will not be included in the present discussion of property costs.

Although items (1), (2) and (3) are separately dealt with in many of the exhibits, we believe it will contribute to simplicity of explanation hereafter to combine them and thus show over-all figures for the interstate physical property and leaseholds. If the Court refers to figures in the exhibits and they seem at first not to be the same as those in the brief this varying treatment of leaseholds will explain the difference.

**Book Cost.** The properties devoted to interstate service as capitalized on the books of Hope as of December 31, 1938 amounted to $52,730,666 (Ex. 20, R. I, 197). The cost so capitalized reflected, of course, the varying accounting practices of Hope over its previous 40-year history. It included only such costs as had been charged to capital accounts on its books at the time the properties were constructed and which had not been retired from the capital accounts. When Hope prepared a detailed field inventory and cost study of its property as of that date it found certain property shown in its capital accounts which did not appear in the inventory and conversely, other property which appeared in the inventory, but was not shown in its capital accounts. Hope made the proper adjustment both ways when it determined the actual original cost of the existing properties (Ex. 20, R. I, 173-177). All of Hope's work sheets and other data with respect to these studies were made available to the Commission's Staff (Ex. 20, R. I, 189).

**Adjusted Book Cost.** The Commission's Staff began with this $52,730,666 book cost and prepared an adjusted book cost, making changes to correct what it called "accounting errors." It accepted Hope's inventory. It then made the same adjustments downward which had been made by Hope for the items of property which had been retired from service but not retired on the books as shown

by this inventory, but made only a small part of the upward adjustments which had been made by Hope to include the cost of the items of property not shown on the books but actually found to exist by the inventory. The balance of these necessary upward adjustments were not made by the Staff, either on the theory that the cost of these existing items of property had originally been charged to other than capital accounts or on the claim that no voucher for them as separate items could be found in Hope's records. The adjusted book cost so arrived at by the Staff for Hope's interstate property was $51,792,000 (Ex. 57, R. I, 219-221).

**Original Cost.** Hope at the direction of the Commission under Section 6(b) of the Natural Gas Act prepared and introduced a statement of the original cost of its property (Ex. 20, R. I, 167). In so doing it considered original cost to mean the amount of money actually spent to construct the various items of property now in service at the time they were constructed regardless of how the expenditures were at the time charged on the books. For reasons hereinafter fully discussed the full original cost was not capitalized on its books. Accordingly Hope went back to its original work orders, vouchers and other records to ascertain what they recorded the actual construction cost of the existing properties to have been at the time of construction and found the actual original cost of all the property now in service to be $69,735,000 (Ex. 20, R. I, 195-197).

The Staff introduced no statement of original cost but claimed that its "adjusted book cost" was also the "original cost" and the "actual legitimate cost" (Smith, R. I, 270).

The difference between the Staff's figures and those of Hope depend on a question of law which is fully discussed beginning at page 30 below.

**Increased Price Levels.** Hope's properties in service on December 31, 1938 were constructed gradually over a period of more than forty years. Necessarily its costs, both original and book, reflected the varying price levels that prevailed over those years. In order to show the effect of these changing price levels upon Hope's property the costs of the various items of property constructed in each year were adjusted by the application of price trends to show what they would have cost if constructed when and as they were but substituting the prices for labor and materials paid by Hope in 1938 for the prices actually paid at the time of construction. The purpose of this was to show just how much change there was in the level of prices applicable to this property over the 40-year period (Ex. 20, R. I, 195-197).

The result of this trending was to show that had the property been constructed in the manner it was, but at 1938 prices, the amount of money actually paid therefor (original cost) would have been $105,101,000 in place of the actual original cost of $69,735,000 (Ex. 20, R. I, 193). Thus the price level applicable to this property in 1938 was more than 50% higher than the average price level prevailing at the times the various items of property were constructed. Exhibit 20 (R. I, 207) contains a summary of the original cost by years together with the trended original cost as shown in the exhibits.

This summary further shows that one-half of Hope's present property was constructed prior to 1917 at an original cost in round figures of $25,000,000. The other half was constructed since 1917 at an original cost of $45,000,000. Accordingly, if both halves of Hope's present property had been constructed over the years since 1917 its original cost would have been $90,000,000, and if its books had been kept in accordance with the present Commission System of Accounts, the recorded book cost would now be $90,000,000.

**Reproduction Cost New.** Hope presented an estimate of reproduction cost new of $97,340,000 (Rhodes, Ex. 16-A, R. I, 165, Ex. 16-B to I, inclusive; Ex. 37, 50). This estimate was made by George I. Rhodes of Ford, Bacon & Davis, a widely experienced engineer in the design, construction and operation of many natural gas systems. It was most carefully prepared.[12] It contained no estimate whatever for the cost of developing the business, or for going concern value, or for any discovery value of the great gas fields developed by Hope (Ex. 16-A, R. I, 162). In other words, it included only the estimated cost of reproducing the physical property with leaseholds included at actual cost.

It will be noted that this reproduction cost is nearly $8,000,000 less than the trended original cost. This is to be expected. The trended original cost reflected a construction of the property by the methods and in the exact manner employed at the time the various items were constructed but at prices prevailing in 1938. The reproduction cost contemplated a present reproduction of the property at one time by the most modern and efficient methods.

The record also showed that The Public Utilities Commission of Ohio in passing on the rates of Hope's affiliate, East Ohio, determined a reproduction cost new of Hope's interstate property as of June 30, 1937 in the amount of $100,257,000 (*Cleveland* case, *supra*, pp. 8-9, Exhibits A and C to Cleveland's "Supplement to Petition and Complaint as Amended" herein, Docket No. G-100, Table 6,

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[12] No Commission witness testified that Hope's properties could be built at present price levels at anything less than the aggregate amount shown in Hope's exhibit. Criticism was made only by one Staff witness as to installation costs on field and transmission lines and as to what pipe prices prevailed in 1938 (Bodner, Ex. 73 and 73A, R. III, 83-95). The record showed that pipe on large scale pipe line projects in 1941 cost more than the 1938 pipe prices used in Hope's exhibit (Rhodes, Tr. 5541-5555; Tonkin, Tr. 5760).

p. 117). Pipe prices as of the date of that determination were higher than the 1938 prices which Mr. Rhodes used. As of 1941 and later, the Ohio Commission's finding of reproduction cost new is probably more accurate than that of Mr. Rhodes (Rhodes, R. II, 72; Tr. 5541-5552; Tonkin, Tr. 5760).

Hope further offered evidence to show that the reproduction cost new determination by the Ohio Commission as of 1937 was merely an adjustment to that date of a reproduction cost new of Hope's physical property agreed to as of 1931 and 1932 between the engineers of East Ohio and of the complaining Cities of Cleveland and Akron. This evidence the Commission excluded (Exs. 121 and 122; Tr. 5927-5945).

**2. Accrued Depreciation.**

**Hope's Evidence.** On behalf of Hope Mr. Rhodes and his engineering assistants determined the amount of accrued depreciation existing in all of Hope's properties as of December 31, 1938, that is the extent to which their total service life had already expired (Rhodes, R. II, 421-422). This determination was made by methods appropriate to each of the several property classifications (Ex. 21, R. I, 355-367; Ex. 22).

Accrued depreciation in Hope's 3300 gas wells was determined on the basis of the proportionate decline in useful rock pressure from the time the wells were drilled to the date certain (Ex. 21, R. I, 356-358). Depreciation of pipe lines was determined by extensive sampling and inspection of buried pipe in 1939, the measurement of the pitting of the pipe inspected, the application of rules developed by the U. S. Bureau of Standards expressing the behavior of pitting in buried pipe and a final determination of the overall extent to which the service life of the pipe lines had been consumed to the date certain (Ex. 21, R. I, 358-360;

Rhodes, R. II, 440-442). Depreciation accumulated in compressor station equipment was based on a 1939 field observation of this equipment, a study of the history of its use and operation, retirements and other factors affecting its service life (Ex. 21, R. I, 360-361). Depreciation accumulated in property in other accounts was similarly determined from inspections in 1939 and similar investigations. In all accounts where necessary an additional allowance was made to provide for accumulated depreciation or expired service life that could not be determined from inspection (Ex. 22).

Mr. Rhodes found Hope's physical properties as a whole to have an average accrued depreciation of 34.51% and a corresponding present per cent condition of 65.49%. The present per cent conditions of the principal classes of physical property were found to be as follows (Ex. 21, R. I, 369-371; Ex. 38):

| | Physical Properties | Reproduction Cost New | Percent Accrued Depreciation | Resulting Percent Condition | Cost New Less Depreciation |
|---|---|---|---|---|---|
| 332.1 | Gas Well Construction | $19,321,139 | 68.7 % | 31.3 % | $ 6,047,517 |
| 332.2 | Gas Well Equipment | 10,874,199 | 43.6 | 56.4 | 6,133,048 |
| 333.1 | Field Lines | 17,282,312 | 26. | 74. | 12,788,911 |
| 352.2 | Compressor Station Structures | 1,957,473 | 28. | 72. | 1,409,381 |
| 353 | Transmission Mains | 16,500,288 | 21. | 79. | 13,035,228 |
| 354.2 | Compressor Station Equipment | 9,874,271 | 19. | 81. | 7,998,160 |
| All other accounts | | 4,868,675 | 20.4 | 79.6 | 3,874,030 |
| Undistributed Construction Costs | | 14,296,099 | 23.66 | 76.34 | 10,913,139 |
| Total | | $94,973,856 | 34.51% | 65.49% | $62,199,414 |

Before this Hope evidence was presented counsel for the Commission assumed that Hope would claim merely "observed physical deterioration" of its properties, as utilities often have (see, for example, *Natural Gas Pipeline* case, 315 U. S. 586, Note 4). However, when questioned on this point Mr. Rhodes explained clearly that he had de-

termined the accrued depreciation from all causes (R. II, 424).[13]

**The Commission's Staff's Evidence.** The Commission's Staff did not undertake to determine by inspection of Hope's properties, by a study of their use and operation, by a study of the past depreciation experience of Hope, or otherwise, what the present actual existing depreciation was in any or all of Hope's properties or what proportion of their service life had expired. Instead Mr. French, a Staff engineer, estimated total service lives for each kind of Hope property—for example 45 years for field line pipe, 40 years for gas well tubing and casing, 39 years for compressor station equipment and 64 years for transmission line pipe (Ex. 65, R. III, 172-173). There was a great deal of evidence showing that these estimates on Hope's long-

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[13] "Q. [By Commission Counsel] Then really, your condition per cent was based upon observed physical deterioration in the Hope properties, was it?

"A. [Rhodes] We started with observed physical deterioration. *There was added to that* all of the effects of obsolescence and things of similar nature which have been and are leading to the retirement of Hope's property, *and on top of all that, there was added* an allowance which I deemed sufficient to cover all depreciation of all other kinds, existing in the property." (R. II, 424)

Mr. Smith of the Commission's Staff in his general oral testimony on depreciation principles (Smith, R. I, 380, 383-384) commented unfavorably on what he called "the observed depreciation" method. However, on cross examination he readily admitted that these comments had nothing to do with Hope's testimony in this case (R. I, 388):

"Q. In your comments upon observed depreciation, do I understand that you were not referring to Mr. Rhodes' testimony?

"A. I was speaking generally of observed depreciation studies.

"Q. And you weren't referring specifically to the testimony in this case?

"A. That is correct."

lived properties were either based on erroneous calculations or were mere "judgments" or guesses by Mr. French (Ex. 65, R. III, 151; Exs. 84, 85, 86, 87, 101, 102, 103, 104; French, Tr. 3463, 3465, 3478, 3484, 3490-3493, 3502, 3508, 3523, 3532-3534, 3553, 3578, 3601; Rhodes, Tr. 5239-5395).

Next Mr. French converted his estimated service lives into annual depreciation rates by dividing the lives into 100—for example the 45 years for field line pipe became 2.22%, the 40 years for gas well tubing and casing became 2.5% and so on (R. III, 172-173). The Staff accountants then applied these annual depreciation rates to their "adjusted book cost" of the properties to compute a so-called "reserve requirement" (Dunn, Ex. 61, R. III, 175). In other words, they calculated the depreciation reserve that they claimed Hope would have accumulated if it had started in 1898 and had each year applied Mr. French's rate to Hope's book costs for its plant (Dunn, R. II, 540-541). Similar computations, using estimated percentages of annual gas withdrawals, were used to arrive at a revised depletion "reserve requirement" for some properties which the Staff claimed should be "depleted" rather than depreciated (Ex. 61, R. III, 180-181, 187). In this instance also there was much evidence showing that the estimated percentages of withdrawal were erroneous and were erroneously applied and that some of the properties which the Staff depleted were not in fact subject to depletion (Exs. 88, 93-97, 100, 119, 141; Dunn, R. II, 473-510; Tollefson, Tr. 4919-4994; Rhodes, Tr. 5233-5237, 5966-5976; Tonkin, Tr. 5773-5785).

As a result of all its computations the Staff worked out an "Adjusted Depreciation Reserve" of $23,501,355.80 as of December 31, 1938 (Ex. 61, R. III, 184-186).

### 3. The Commission's Rate Base Determinations.

The Commission's rate base calculation was as follows (Opinion, R. I, 50):

| | December 31, 1938 | December 31, 1940 |
|---|---|---|
| "Gross Investment in Gas Plant in Service" (including all leaseholds[14]) | $51,792,000 | $52,523,000 |
| Less: "Actual Existing Depletion and Depreciation" | 21,188,000 | 22,328,000 |
| "Net Investment" | $30,604,000 | $30,195,000 |
| Add: "Working Capital"[15] | 2,100,000 | 2,125,000 |
| "Interstate Rate Base" | $32,704,000 | $32,320,000 |

For the purpose of its order reducing future rates the Commission used the rate base shown for December 31, 1940 plus an allowance of $1,392,000 (Opinion, R. I, 50) for one-half of Hope's net capital additions during the years 1941 to 1943. The corresponding figures for December 31, 1938 are shown because in the evidence heretofore stated it was figures of that year that were used.

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[14] The unoperated leaseholds were found by the Commission, as the evidence showed, to be "useful or imminently useful and * * * necessary for the continued and efficient production of natural gas" (Finding (14), R. I, 4). The Commission's further finding that "its cost should be included in the rate base" (*ibid.*) was clearly required by the evidence. This was no item of "liberality" for which any credit may be claimed, as the petitioners now try to do (Com. Brief, 31).

[15] In addition to an uncontested amount for materials and supplies the Commission allowed $871,407 cash working capital as of December 31, 1938 and $896,401 for 1940 (R. I, 49). Hope's testimony showed that as a practical business matter it needed at least $1,750,000 (Ex. 36; Chisler, Tr. 1781-1782). The Commission brief's reference to "Hope's corrected claim" (p. 32) is apparently based on the lower court's remark that if certain adjustments were made in Hope's estimate the result would be less than the Commission's allowance (R. IV, 194). This remark overlooked the offsetting adjustment to include prepaid items which the Commission recognized in its Opinion had to be made (R. I, 49). This allowance by the Commission of half the cash working capital Hope testified it needed is another of the items of "liberality" for which it now claims credit (Com. Brief, 32).

As we have seen, when the Commission fixed the above rate base it had before it the following undepreciated costs or values for the interstate property as of December 31, 1938:

| | |
|---|---|
| Book Cost | $ 52,730,000 |
| Staff's Adjusted Book Cost | 51,792,000 |
| Original Cost | 69,735,000 |
| Original Cost at 1917-1938 prices | 90,000,000 |
| Original Cost Trended to 1938 prices | 105,101,000 |
| Reproduction Cost New: | |
| Ohio Commission—6/30/37 | 100,257,000 |
| Company—12/31/38 | 97,340,000 |

The Commission started its rate base computation with the exact dollars shown by its Staff's adjusted book cost of $51,792,000.

The source of the "Actual Existing Depletion and Depreciation" in the Commission's rate base calculation is the Staff's "Adjusted Depreciation Reserve" of $23,501,355 as of December 31, 1938. The Commission revised this reserve downward to $21,188,000, on the basis of four of the obvious errors pointed out by Hope in the application of the Staff's own theories (Kennedy, Exs. 137 and 138, Tr. 6492-6519; Opinion, R. I, 43-45). However, following the Staff's general notions, the Commission said this "required depreciation and depletion reserve" is "the best evidence of the measure of actual existing depreciation and depletion and it will be deducted from the actual legitimate cost of the Company's property for rate making" (Opinion, R. I, 45).

This "required depreciation and depletion reserve" is about 41% of the adjusted book cost from which it was deducted to arrive at the Commission's rate base.

The Commission's "Net Investment" rate base includes operated and unoperated leaseholds at cost less depletion in the amount of $1,212,600 for December 31, 1938 (R. I, 50; R. III, 188). Thus its "Net Investment" rate

base for Hope's physical properties is $29,391,400 for December 31, 1938.

The present value of these physical properties was determined at $66,166,382 as of June 30, 1937 by The Public Utilities Commission of Ohio in the *Cleveland* case, *supra*, pages 8-9, and affirmed by the Supreme Court of Ohio in that case (R. IV, 171; Exhibits A and C to Cleveland's "Supplement to Petition and Complaint as Amended," Docket No. G-100, Table 6, p. 117).

These physical properties which appear in the Commission's rate base at about $29,000,000 were valued for 1941 taxation by the State of West Virginia at over $50,000,000 (Ex. 108, R. I, 391-393; Tr. 5431-5433, all excluded by the Commission[18]).

## B. THE RATE BASE CALCULATION OF THE COMMISSION STARTED WITH A FIGURE THAT IS OVER $17,000,000 BELOW THE ACTUAL ORIGINAL COST OF HOPE'S INTERSTATE PHYSICAL PROPERTIES AND LEASEHOLDS.

*(Com. Brief, 70-89; Cleve. Brief, 39-46)*

### 1. Statement of This Issue.

We start with this issue, not because it is the most important, but because whatever method of arriving at a rate base is adopted, an important element of evidence is the true original cost.

At the direction of the Commission (R. II, 36), pursuant to Section 6(b) of the Natural Gas Act, Hope prepared a detailed field inventory and a statement of the original cost of its properties (Ex. 20, R. I, 167-207) *supra*, pages 20 to 21. In doing this Hope followed the accounting principles set forth in the Commission's Uni-

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[18] This exclusion was erroneous. *City of Lima v. The Public Utilities Commission*, 106 O. S. 379, 140 N. E. 147 (1922); *Greencastle Water Works Co. v. Public Service Commission of Indiana*, 31 F. (2d) 600 (D. C., S. D. Ind., 1929); *Great Falls Gas Co. v. Public Service Commission of Montana*, 34 F. (2d) 297 (D. C., D. Mont., 1929).

form System of Accounts (Ex. 58, R. III, 41-68) and the new West Virginia System of Accounts which is practically identical with the Commission's System (Ex. 13). The statement of original cost prepared by Hope is the statement which its books would actually show today had they been kept from the beginning in accordance with the new System of Accounts (Antonelli, R. II, 226, 179, 207). All annual operating statements prepared by the various parties in this case were prepared in accordance with the same System. Thus Hope achieved an entire consistency between the accounting principles used in preparing the annual operating statements and the accounting principles used in determining all evidence as to rate base. Proceeding in this way it found that the amount of money actually spent to construct Hope's present properties as of December 31, 1938 was $69,735,000 (Ex. 20, R. I, 195-197).

As we have seen, in preparing the original cost statement ordered by the Commission Hope went back to its original work orders and vouchers and determined the actual amount of money spent for each item of existing property at the time of its construction (Ex. 20, R. I, 174, 195-197). The original work orders and vouchers were available for this to the extent of 94% of the property. In the case of the remaining 6% estimates were made of the probable cost at the time of construction[17] (Antonelli, R. II, 184).

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[17] In determining the original cost of the properties by examination of its books of account, vouchers and other records and similar records of its predecessor companies, Hope was unable to secure records relating to minor amounts of property acquired from other utilities, the original cost of which had to be estimated upon the basis of Hope's experience in constructing similar properties under similar circumstances and during like periods (Ex. 20, R. I, 182). Similar estimates had to be made in the case of a few small field lines laid prior to 1907, a few early compressor station and other structures, and minor miscellaneous equipment (Ex. 20, R. I, 186, 188-189). In certain other cases the actual total cost of a group of properties was allocated among several properties on the basis of estimates but the total amounts included in original cost were determined directly from actual records and vouchers (Ex. 20, R. I, 186-187).

As we have noted, the Commission's Staff started with Hope's book costs of $52,730,666 and adjusted them for what it found to be "accounting errors" to $51,792,000, with which the Commission began its rate base calculation (Opinion, R. I, 50). This latter figure the Commission and its Staff referred to variously as "Investment in Gas Plant per Books as Adjusted" (Ex. 57, R. I, 219), "Gross Investment in Gas Plant in Service" (Opinion, R. I, 50), "Original Cost" (Ex. 57, R. I, 209, 215) and "actual legitimate cost" (Order, R. I, 10, 11).

The Commission made no attempt whatever to determine original cost on the accounting principles set forth in its Uniform System of Accounts and thus to make its rate base accounting consistent with its annual operating statement accounting.

Thus the difference between the parties is fundamentally a question of what is original cost. There was no dispute about the facts. It was conceded by Staff witnesses that if the Staff's conception of original cost had been the same as that of Hope the Staff would have arrived at substantially the same dollars shown by Hope (Smith, R. I, 300; Pace, R. I, 318-321, 324-326). Thus whether the Commission or Hope correctly stated what money was actually spent to construct Hope's existing properties is not in issue. Admittedly Hope's original cost figures show this.[18]

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[18] In the reply brief filed by the Commission's Staff before the Commission the correctness of this statement was admitted in the following language, page 12:

> "On page 40 of the Company's Brief the statement is made that Mr. Smith and Mr. Pace of the Commission's Staff would not differ with the Company's claims on gross dollars that were originally spent on the various Company accounts. This is a correct statement, but does not disclose the complete picture. The other half of the picture is the past voluntary assignments by the Hope Company to operations of a part of the gross dollars originally expended. * * *"

The difference between the parties consisted of the following items (Ex. 59, R. I, 351, 353):

| | |
|---|---|
| Drilling and other direct well construction costs for 2,633 wells | $12,643,641 |
| Other direct material and labor costs of buildings, pipe lines and other miscellaneous property | 1,380,154 |
| Field and general overheads, including interest during construction | 3,825,126 |
| Total | $17,848,921 |

Brief comment as to each of these is necessary.

Prior to 1923 Hope had charged the cost of drilling wells to operating expenses (Ex. 20, R. I, 185). The first West Virginia System of Accounts became effective as to Hope in 1923 (Ex. 117; Chisler, R. II, 174) and required these costs to be capitalized as does the Commission's present System of Accounts (Ex. 58, R. III, 41). Hope now has in service approximately 3300 wells the total direct drilling cost of which was a little more than $16,500,000 (Ex. 20, R. I, 195-197). Of this $16,500,000 a little over $4,000,000 is capitalized on the Company's books and represents the 772 wells now in service which were drilled or drilled deeper after 1922. The Commission in its so-called "original cost" has in the inventory the 3300 wells. In the equipment account it has the cost of equipping 3300 wells but in construction or well drilling cost it has only the cost of drilling or drilling deeper 772 wells (Pace, R. I, 318-320). Hope, of course, has included the cost of drilling all wells now rendering public service (Opinion, R. I, 25). This one item accounts for $12,643,000 of the difference between the original cost as determined by Hope and by the Commission.

$1,380,000 of the difference represents all or a large part of the cost of the following among other items of property now actually being used by Hope to produce and deliver gas, which the Commission excluded entirely from its original cost (Ex. 59, R. I, 349-353; Ex. 60):

275 warehouses, barns, garages, blacksmith shops, sheds, tool houses, storage buildings and wash houses;

686 pits, bridges, fences, pipe skids, pipe racks and sidewalks;

2,945 benches, racks, heaters, cabinets, tables, truck flat beds and accessory items;

152 miles of pipeline trench for lines from 1" to 20";

9,584 telephone poles with crossarms, brackets, pins and insulators;

122 meter houses;

1,386 meter boxes;

752 installation costs for tanks, pumps, motors, engines, gas coolers, boilers, traveling cranes, etc.

When a check of Hope's inventory with its books disclosed property such as this in the inventory was not on the books, and some property on the books was not in the inventory, Hope made the adjustments both ways in all cases (Ex. 20, R. I, 177) but the Commission did not.

Let us illustrate by a concrete example. On one of its main transmission lines, H-3, Hope put in a new river crossing which cost over $10,000. At the same time the old river crossing was taken out and retired from service. On its books, however, Hope charged the cost of the new river crossing to expense and left the old river crossing, which cost $8,000, in its capital account. When the preparation of the inventory and the examination of the records disclosed this Hope deducted the $8,000 cost of the old river crossing from, and added the $10,000 cost of the new crossing to, its original cost statement (Antonelli, Tr. 5025-5026).

When the Commission accountants checked this they adopted the reduction of the book costs to retire the old river crossing but declined to include in their adjusted book costs the cost of the new river crossing, presumably because that had been previously charged to expenses. The result is that in the Commission's rate base there is not one penny on account of this river crossing now in use. There were many items of property so treated by the Staff. (Antonelli, Tr. 5026-5027).

$3,825,000 of the difference represents overhead costs of constructing Hope's properties (Ex. 59, R. I, 349-353) which at various times in the past Hope charged to operating expenses or, in the case of interest during construction, did not enter on its books at all since Hope did not account for the interest which its own funds were entitled to earn. In the case of these items as in the case of others there was no substantial disagreement as to the amount of these costs but the Commission and its Staff disallowed them on the ground that they had not previously been capitalized (Smith, R. I, 251-254).[19]

We turn then to the meaning of original cost.

**2. Meaning of Original Cost.**

The differing conceptions of original cost of the Commission and Hope may be tersely stated. Mr. Smith, the Commission's chief accountant, defined original cost as

> "the cost accounted for in the past [on the Company's book plant accounts] exclusive of errors in accounting." (Smith, R. 1, 233-234)

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[19] Both Hope and the Commission's Staff excluded from current operating expenses all current overhead costs on current property construction. Hope did so to be consistent between rate base and operating expenses. The Staff was not consistent in that it also excluded overhead charges from capital accounts. The Commission in its Opinion (R. I, 49-50) added current overhead costs to current operating expenses, thus in this instance eliminating the inconsistency in the Staff's accounting treatment. Hope made no claim in any of its exhibits for current overhead charges in operating expenses and none of Hope's figures shown in this brief indicating the results of current operation include them. Hope of course is not entitled both to the capitalization of overheads and an annual allowance in expense for overheads.

Hope's decision to treat overheads as current expense, referred to in the Commission's Opinion (R. I, 49), was made in view of the anticipated action of the Commission excluding overheads both from rate base and from operating expense. In testing rates the capitalization method gives Hope the proper allowance. The current expense method used by the Commission and based solely on the overheads incurred in the improvements and betterments made in a single year does not.

This means that if, in accordance with any acceptable practice prevailing at the time the entries in the books were made, expenditures were charged to operating expense they cannot now be considered a part of the original cost, even though by the present System of Accounts they are required to be charged to capital account and even though no corresponding items now appear in expense (Smith, R. I, 238). Thus to Mr. Smith and the Commission "original cost" and "actual legitimate cost" mean no more than the recorded book costs slightly adjusted for what are determined to be "accounting errors" made at the time (Smith, R. I, 233-234; 287-288).

Hope's conception of original cost is that it means the amount actually paid to establish the utility to be ascertained as a fact from the Company's books, work orders, vouchers and other direct evidence, if possible, and to be estimated where these are not available, and that this must be done in accordance with the same accounting principles that are used in setting up the annual operating statements. Otherwise, as will be shown later, the cost of gas is either understated or overstated. Without such consistency rates cannot be fair.

**(a) Meaning of original cost prior to the passage of the Natural Gas Act.**

The term "original cost" inserted in the Natural Gas Act by Congress in 1938 was not a new conception. It was at least as old as the fair value rule itself and was stated in *Smyth v. Ames*, 169 U. S. 466, as one of the facts to be considered as evidence of value.

What courts, commissions, economists and accountants have all recognized as a proper definition of original cost is nowhere better stated than by Mr. Justice Brandeis, in his celebrated concurring opinion in *State of Missouri, ex rel. Southwestern Bell Telephone Company vs. Public Service Commission*, 262 U. S. 276. In a note at page 295

he defined original cost and the method of determining it as follows:

> "Original cost is the amount actually paid to establish the utility. The amount is ascertained, where possible, by inspection of books and vouchers, and by other direct evidence. If this class of evidence is not complete, it may be necessary to supplement it by evidence as to what was probably paid for some items, by showing prices prevailing for work and materials at the time the same were supplied. But the evidence of these prices is merely circumstantial, or corroborative, evidence of the amount actually paid. In determining actual cost, whatever the evidence, there is no attempt to determine whether the expenditure was wise or foolish, or whether it was useful or wasteful. Historical cost, on the other hand, is the amount which normally should have been paid for all the property which is usefully devoted to the public service. It is, in effect, what is termed the prudent investment. In enterprises efficiently launched and developed, historical cost and original cost would practically coincide both in items included and in amounts paid; that is, the subjects of expenditure would coincide, and the cost at prices prevailing at the time of installation would substantially coincide with the actual cost."

Nothing could be plainer than that in Mr. Justice Brandeis' view, original cost is the amount of money originally paid to establish the utility. He said nothing about the amount of money that was charged to capital accounts on the books of the company and nothing about corrections for accounting errors. He said original cost was a *fact* to be ascertained by an examination of the original work orders, vouchers, books and other records of the company. If the cost of part of the property could not be ascertained from direct evidence, it was to be estimated and evidence received "as to what was probably paid for some items."

Not only was this Mr. Justice Brandeis' conception but it was the conception of every other writer and authority on

the subject. In Appendix B at page 159 below we have printed excerpts from numerous economists, accountants, courts and commissions all of which in varied language say that original cost is the amount of money spent in the construction of the present property, that it may or may not be represented by the book cost, and that it is to be determined as a fact from all the evidence including estimates where these are necessary to supplement records.

**(b) The provisions of the Natural Gas Act support Hope's construction.**

Not only did Congress thus use words with a well settled meaning but the language of the Natural Gas Act itself indicates this construction. Section 6(b) of the Act requires a natural-gas company upon request of the Commission to file an inventory of its properties "and a statement of the original cost thereof." If by original cost it meant merely the company's book cost there was no occasion for an inventory and the Act should have provided that the company should file a statement of its balance sheet accounts or a statement of the capital accounts on its books. Since these are a part of every financial statement that a gas company makes there was really no reason for inserting Section 6(b) at all if the Commission's interpretation is correct. Clearly the statement of original cost required by Section 6(b) was a statement of the cost of the various items of its property shown in the inventory and not simply the ordinary statement of a company's plant accounts.

Where a natural-gas company is required to file an inventory of all its property under Section 6(b) it is an anomalous construction of that section to hold that in stating the original cost of that same property it shall state only the cost of so much of the property as was at the time of construction capitalized on its books. Specifically, here Hope was required to file an inventory including all of its 3300 wells. It is not to be supposed that it is then to state

as the original cost of drilling these 3300 wells the cost of drilling or drilling deeper only 772 of them, which is all that is recorded in Hope's plant accounts or included in the Commission's "original cost" (Ex. 16, Pt. B, 95; Pace, R. I, 319).

Plainly Section 6 of the Natural Gas Act contemplates the amount of dollars "actually paid to establish the utility" as Mr. Justice Brandeis said and not merely "the cost accounted for in the past exclusive of accounting errors" as Mr. Smith said (R. I, 233-234).

**(c) Hope's construction of "original cost" was adopted in 1939 by the Commission in its uniform system of accounts.**

As authorized by Section 8 of the Natural Gas Act the Commission on November 3, 1939 adopted a Uniform System of Accounts to become effective as to all natural-gas companies on January 1, 1940. This is Exhibit 58 (R. III, 41). Its purpose and its language both support the construction of the term "original cost" adopted by Hope and deny that used by the Commission in its decision in this case.

To bring uniformity, consistency and comparability to the balance sheet and income accounts of natural-gas companies the Commission's Uniform System of Accounts required, first, that after January 1, 1940 all balance sheet and income accounts should be kept in accordance with its requirements, with gas plant properties shown in capital accounts at their original cost and, second, that the properties existing on January 1, 1940 should be reclassified into the new plant accounts in accordance with the requirements of the new System (Ex. 58, 16, 36-37, R. III, 47-49). The original cost which was thus to be shown not only for the properties built in the future but for all existing properties was defined to mean the amount of money actually paid for the property by the person first devoting it to

public service.[20] No previous system of accounts for gas companies had required such a restatement of the cost of the property installed prior to its effective date.

Thus all natural-gas companies were required to make a new start by restating their plant accounts on their books at original cost as of January 1, 1940 precisely as though the new Uniform System of Accounts had been in effect from the beginning. This original cost was defined as Mr. Justice Brandeis had defined it and of course had to be determined in the same way for all companies in order to

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[20] The Commission's Uniform System of Accounts requires that Account 100.1, Gas Plant in Service, shall "include the original cost of gas plant" (Ex. 58, p. 16). Original cost as applied to gas plant is defined to mean "the cost of such property to the person first devoting it to public service" (Ex. 58, R. III, 44). Cost is defined as meaning "the amount of money actually paid for property or services or the cash value at the time of the transaction of any consideration other than money" (Ex. 58, R. III, 42). Thus the original cost to be shown for property in service is the amount of money actually paid for it by the person first devoting it to public service. See Gas Plant Accounts 100.1, 100.2, 100.4, 100.5 and 107 and the instructions relating thereto (Ex. 58, 16, 17 and 36; R. III, 47). Cost is to be "ascertained by an analysis of the utility's records" (Ex. 58, Instruction 2B, R. III, 48) and original cost is to be "estimated if not known" where properties have been acquired (Ex. 58, Instruction 2C, R. III, 48).

The footnote at page 74 of the Commission's brief stating that the present System of Accounts prohibits the reaccounting for items properly charged to expense in the past is based upon the existence of one sentence in the "Instructions" (Ex. 58, R. III, 48). Instruction 2 B says among other things that in making a classification of accounts to show original cost it is "not intended" that adjustments be made to record amounts previously charged to operating expenses "in accordance with the uniform system of accounts in effect at the time or in accordance with the discretion of management as exercised under such uniform system of accounts." This one sentence is inconsistent with every other definition, direction and instruction in the code (Antonelli, R. II, 179-180). Moreover, Hope's charges to expense in prior years, such as well drilling costs, were not so charged "in accordance with the uniform system of accounts in effect at the time." These charges occurred mostly prior to 1923 (Ex. 99, 10; Chisler, R. II, 174) when there was no uniform system of accounts applicable to Hope (R. II, 174).

achieve the object of uniformity. The result of this requirement was that all natural-gas companies would show their plant accounts both for old and new properties on the same basis in accordance with the new System and consistent with their operating expense statements. All companies would be on a uniform and comparable basis.

All this the Commission denied by its Opinion in this case. Instead it interpreted this accounting code to require the continued statement of the cost of items of plant acquired prior to 1940 in accordance with past accounting practices of each individual company, so long as they do not involve what are called "accounting errors." Mr. Smith answered "absolutely" to a question as to whether he would "freeze the accounting practices of the Company, if they were not due to error, in their statement of plant accounts" (Smith, R. I, 287-288).

To be more specific, if two companies had each spent $10,000 in drilling and $10,000 in equipping a well in 1920 and one company had charged the drilling cost to capital account and the other had charged it to expense, both being acceptable methods of doing it at the time, the Commission would now have one company continue in its plant accounts as the original cost of its well $20,000 and the other company $10,000. And if a third company had charged both the cost of drilling and equipping a well to expenses at the time it was drilled and this were at the time a recognized accounting practice the Commission would have that well included in the statement of original cost at zero (Smith, R. I, 288-289, 293). And this would be true although all of these wells are today in active operation and supplying gas to consumers. The Commission would include in the respective rate bases of these companies $20,000 in one, $10,000 in another and $0 in the third, less in each case, except the last, a computed depreciation reserve.

### 3. The Commission's Determination of a Rate Base Inconsistent with Its Determination of Operating Expenses Has Arbitrarily Understated Hope's Cost of Gas.

All operating expense statements submitted by the parties and as found by the Commission conform to the accounting requirements set forth in the Commission's Uniform System of Accounts which became effective January 1, 1940. Hope adjusted its operating statements for the years prior to 1940 in order to conform them. As previously pointed out, Hope likewise followed these accounting requirements in determining original cost. The Staff admitted that Hope's rate base and operating statements were consistent (Smith, R. I, 298, 300).

The Commission has not been consistent. It has taken Hope's book costs that reflect the accounting practices of 40 years, slightly adjusted them for what it determined to be accounting errors and thus has a rate base that clearly is not constructed on the same accounting principles as the operating statements.

The Commission's reason for its inconsistency is thus stated in its Opinion (R. I, 29):

> "No greater injustice to consumers could be done than to allow items as operating expenses and at a later date include them in the rate base, thereby placing multiple charges upon the consumers."

In Note 12, page 18 of the Opinion (R. I, 32) the Commission further says:

> "Costs of exploration for and development of future gas reserves are considered current operating costs by the industry and Hope has included such costs in its current operating expenses. If retroactive accounting were allowed then the Company might restate these costs as capital investment in the future productive acreage. The Commission will allow $600,000 in annual operating expenses for exploration and development costs in fixing rates. If this item were permitted to be restated in plant cost ten years from now

> $6,000,000 would be added to the rate base resulting in multiple charges to consumers."

The reasons thus set forth by the Commission are repeated in its brief in this Court (pp. 86-87).

Let us take this illustration selected by the Commission and see what the effect upon rates will be if it is treated as the Commission suggests it should be or with consistency as Hope claims.

*Case One on Commission's Theory.* Hope is to have $600,000 per year in expenses for exploration and development costs, which represents roughly 1¢ per M.c.f. in the cost of gas. Suppose effective January 1, 1944 the Commission's System of Accounts is changed to require that thereafter all exploration and development costs shall be capitalized and suppose that it becomes necessary to fix a new rate for Hope as of January 1, 1945. Since these costs have not previous to 1944 been capitalized and since, on the Commission's theory, now to do so and include them in the rate base would result in multiple charges to consumers, there will appear in capital account on Hope's books on January 1, 1945 only $600,000 by way of exploration and development costs—the amount capitalized in the year 1944. This and only this would go into the rate base. And since for the year 1944 the System of Accounts would no longer allow development costs to be charged to operating expenses, there would be nothing in operating expenses for this item. In computing the rate, therefore, the Commission would have in the rate base only $600,000 and if it allowed Hope say 10% of this amount for return and depletion there would be in expenses only the annual capital charges of $60,000 per year, or 1 10th of 1¢ per M.c.f. in the cost of gas. In other words, Hope's cost of gas has apparently been reduced approximately 9/10ths of 1¢ per M.c.f. solely because the change the Commission ordered in accounting has been applied fully to income statement but only partially to capital account.

*Case Two on Commission's Theory.* Let us now see how the rule works in reverse. Suppose exploration and development costs prior to 1944 had been charged to capital account and effective January 1, 1944 were thereafter required to be charged to operating expenses. In fixing a rate as of January 1, 1945 the Commission would find in capital account about $20,000,000 (Ex. 26, 9) representing exploration and development costs capitalized prior to 1944. This would go in the rate base at a depleted condition of the wells of approximately 30% or about $6,000,000 (Ex. 26, 9) upon which, again assuming 10% for return and depletion, Hope would be allowed $600,000 as capital charges in its rates. But in operating expenses of the test year 1944, in accordance with the changed System of Accounts, it already would have $600,000 representing the exploration and development cost of that year. If consistency between operating statement and rate base is disregarded, and adherence to accounts as entered is insisted on, as the Commission claims, the result of this change in accounting requirements would be an allowance to Hope of $1,200,000 per year for exploration and development costs, or the equivalent of about 2¢ per M.c.f. in the cost of gas. This is about twice the normal cost that has been assumed and is again due solely to a change in accounting ordered by the Commission and not fully applied both to rate base and operating statements.

In other words, the Commission's method, which fails to preserve any consistency between rate base and operating expense statements, inevitably results either in an understatement or an overstatement of the cost of gas whenever there is a change in accounting practice.

*Effect of Consistency.* On the other hand, if consistency is maintained there will be no substantial change in the cost of gas. There will be approximately $600,000 allowed in operating expenses either directly as current annual exploration and development costs or through capital

charges on past costs. Thus the cost of gas will not fluctuate with each change in accounting practice ordered by the Commission.[21]

Consistency requires that when *any* cost is included in current expense all *like* costs must be eliminated from the rate base, and in reverse when *any* cost is excluded from current expense and capitalized all *like* costs *must* be included in the rate base. Duplicate charges can occur only when the expenditures are considered in determining both current expense and rate base.

One more illustration of the effect of the Commission's inconsistency is important in this case. Well drilling costs were not capitalized prior to 1923 but since that date under the various codes of account they have been. Suppose that down to January 1, 1937 the cost of drilling presently operated wells had been capitalized in the amount of $16,500,000, and then beginning January 1, 1937 by a change in the System of Accounts such costs were required to be

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[21] It is difficult to believe the Commission was familiar with the record in this case when it selected this particular illustration of exploration and development costs. In Exhibit 26 Mr. Rhodes worked out the two methods of handling exploration and development costs. The one method he called "Industry Practice of Charging to Expense" and the other method the "Capitalization Method" (Ex. 26, 11). In the first method he used the average of Hope's exploration and development costs for the years 1937 to 1939, both inclusive, as fairly representative; in the second method he capitalized all Hope's exploration and development costs from the beginning down to December 31, 1938, attributed these to all operated acres Hope had ever developed, and retired these costs in proportion as operated acres were retired, depleting the remainder on the same basis as the wells. At all times he maintained complete consistency between rate base and operating expense statements.

He found that on the basis of an 8% rate of return the expense method would put $669,702 annually in operating expenses, whereas the capitalization method would put in expenses $742,390 (Ex. 26, 11). On the basis of a 6½% return, which the Commission used in this case, the figures become $652,240 on the expense method and $655,187 on the capitalization method. The difference between the two methods is wholly inconsequential.

charged to operating expenses. On the Commission's theory the $16,500,000 less depletion would go into the rate base and Hope would be given a return and annual depletion allowance thereon. At the same time there would go into operating expenses the annual well drilling costs for the years 1937 to 1940, resulting in a substantial duplication of cost at the expense of consumers.

It is a partial reverse of that situation that is presented here. Well drilling costs were not capitalized prior to 1923. Since that time they have been. The book costs therefore reflect only the cost of drilling 772 wells drilled since 1922 but do not show the cost of drilling 2600 wells now in use but drilled prior to that time. On the other hand, in operating expenses of the test years 1937 to 1940 there is no allowance for well drilling costs. The result is that the Commission's order includes an inadequate and sub-normal allowance for well drilling. *It has no allowance for return or depletion on the drilling cost of 2600 wells from which gas is currently being supplied to consumers.*

The Commission's inconsistent basis for operating expenses and rate base is arbitrary and demonstrates that its interpretation of "original cost" in the Natural Gas Act is unsound.

**4. The Omission from the Commission's Rate Base of any Consideration of Property Costing Over $17,000,000 is not Justified on the Ground that These Costs have been Recouped by Hope from Consumers or on Other Grounds.**

*(Com. Brief, 78-85; Cleve. Brief, 39-46)*

The justification for the omission of these property costs is placed on various grounds. It is said that a company should not be permitted to impeach the integrity of its books or discretions exercised by management (Opinion, R. I, 31). The principal claim, however, is that Hope's rates were larger in the past than they would have been

if these expenditures had been charged to capital account and that in consequence Hope has "recouped" the expenditures from consumers and no longer has any investment in them (Opinion, R. I, 34; Com. Brief, 78-85; Cleve. Brief, 42).

As to impeaching books it is clear that Hope in setting forth a correct original cost in accordance with modern accounting procedures is not in any wise impeaching its books or its records. In fact it uses all of those for the purpose of finding the true cost. This no more impeaches these records than would a determination of reproduction cost new or any other method of measuring the value of the whole property as presently existing.

Moreover, it is to be observed that the position is not one for which Hope is responsible. Hope might well have been charging well drilling costs to operating expenses up to the present day had not West Virginia in 1923 ordered it to do otherwise. That as a matter of proper accounting West Virginia was right in requiring well drilling to be capitalized the Commission admits by its own System of Accounts. Thus the Commission, not Hope, has reversed former decisions of management on accounting matters. *But the Commission seeks to reverse these decisions only as to the operating statement and not as to the capital statement, thereby substantially understating the present cost of gas.*

As to whether Hope's rates in the past were higher then they otherwise would have been, the Commission's assumption is contrary to both theory and fact. In theory, costs will be somewhat higher by the capitalization method than by the expense method used by Hope in the past. This is obviously so because in the capitalization method interest or return on the amount capitalized must be included whereas in the expense method this is not so. In theory, therefore, Hope's rates in the early days (if they were determined in accordance with modern regulatory theories) were lower because they were determined on an

expense method as to the items in dispute than they would have been if they had been determined by the capitalization method.

Laying theory aside, the fact is that Hope's bookkeeping methods prior to 1923 had little to do with fixing rates. As previously shown in the Statement, *supra*, pages 6 to 9, Hope's largest customer, East Ohio, made its earliest contracts with Akron and Cleveland in 1898 and 1902 for ten-year periods in advance and in the case of Cleveland, East Ohio's largest customer, renewed it for a ten-year period in advance to expire in 1921. Hope also fixed its contract rates to East Ohio for ten-year periods in advance.

Thus until 1921, which covered practically all the period when well drilling and other costs were being charged to expenses, the rates to Hope's principal customer and the rates to East Ohio's principal customers were all fixed by long term contracts in advance. In fact the first ones were made for ten years in advance of any exact knowledge of what operating expenses would be. After these contracts were made it was a matter of no consequence to any one what items either East Ohio or Hope charged to operating expense. Consumers who were able because of these contracts to replace artificial gas containing 550 B.t.u. and costing certainly not less than 75c per M.c.f. with natural gas containing 1100 B.t.u. at 30c per M.c.f. were not concerned either with how much money the two companies made or how they kept their books.

These simple facts are a complete answer to all the assumptions and theories in the petitioners' briefs that consumers in the past paid items charged to expense on the books or paid higher rates than they otherwise would when as a matter of fact the rates were fixed long before the book entries were made.

The truth is that this "recoupment" theory is merely a thinly disguised attempt at retroactive regulation covering the past 44 years without going through the steps neces-

sary to proper regulation. Obviously what effect a different method of treating well drilling costs in any year prior to 1923 would have had on rates could only be determined by a careful determination of rate base and operating expenses for that year and similarly for other years. It cannot be determined merely on the assumption that a utility that made money from the natural gas business and from other sources has made enough over its entire history so that its well drilling costs have been "recouped." Such an assumption would be equally applicable to capitalized costs of any property.

Nor is it helpful to refer to the case of *Re Hope Natural Gas Co.*, P. U. R. 1921E, 418 (1921) (Opinion, R. I, 29). It is true that in that case, which concerned only rates in West Virginia, Hope, in accordance with its then accounting practice, included current well drilling costs in operating expenses and consistently did not capitalize past well drilling costs. Also, in repeated recent cases in Ohio Hope's well drilling costs have all been capitalized and the current well drilling costs excluded from expense (Smith, R. I, 283-284). Consistency was preserved in every case. There was no duplication of costs and no omission.

However, it is interesting to note that in this West Virginia case the West Virginia Commission found that for the years 1918, 1919 and the first six months of 1920 Hope failed to earn the return from its utility business fixed by the Commission by $1,100,000 per years (*ibid.*, 433). Here is a direct finding that at least in that thirty-month period prior to 1923 Hope was not recouping its drilling costs in addition to a fair return from its utility operations.

General statements as to Hope's earnings during this or any other period (Opinion, R. I, 34) are not a substitute for such necessary determinations because, as we have seen at page 10, *supra*, over its history Hope has had approximately $40,000,000 of earnings from other sources than its natural gas service. Also, a great portion of Hope's early natural gas sales were not to "rate payers" at all, but

were field sales to drillers, pumpers and others in West Virginia (Tonkin, Ex. 2, 2; Ex. 4, 50-51).

Had the Commission attempted to determine any "recoupment" as a matter of fact, that attempt would have forcibly illustrated that the rate making theories the Commission applied in fixing Hope's rate base in this case are wholly retroactive. Without making this necessary "recoupment" determination the Commission nevertheless eliminated these early well drilling and similar property costs from the rate base. Such retroactive rate regulation is not authorized under the Natural Gas Act and is obviously arbitrary under the Constitution.

This is not to say that there may not be particular cases where the principles of estoppel are applicable as to utilities' past accounting practices, as for example in *Los Angeles Gas & Electric Corp. v. Railroad Commission*, 58 F. (2d) 256. This and the other cases cited by the petitioners on this point are analyzed in Appendix C, page 174, *infra*. They lend no support to the Commission's retroactive determinations in this case. We have also set forth in Appendix B, page 159, *infra*, a number of court and commission decisions establishing that in the absence of particular estoppel it is wholly improper to eliminate property items from the rate base because they were in the past charged to operating expenses.

Additionally in *Board of Public Utility Commissioners v. New York Telephone Company*, 271 U. S. 23, at page 32, this Court said:

> "Customers pay for service, not for the property used to render it. Their payments are not contributions to depreciation or other operating expenses, or to capital of the company. By paying bills for service they do not acquire any interest, legal or equitable, in the property used for their convenience or in the funds of the company. Property paid for out of moneys received for service belongs to the company, just as does that purchased out of proceeds of its bonds and stock."

The application of this decision to the Commission's determination in this case is direct. When Hope included well drilling costs in operating expenses the effect was equivalent to the setting up of a 100% depletion or depreciation reserve on each well as drilled in each year, rather than accruing a depletion reserve on the basis of the production from that well spread out over a number of years. The Commission's decision here is in substance that Hope's future rates should include less return and a lower depletion charge than otherwise necessary because, in the Commission's view, Hope has charged excessive depletion amounts on these wells in the past. Hence Hope should furnish free to present consumers the annual use and annual consumption of its pre-1923 wells and other property. This is just what this Court condemned in the *New York Telephone* case.

The Commission itself recognized this principle in its treatment of Hope's depreciation reserve in this case. Commissioner Scott, dissenting from the Commission's Opinion (R. I, 80-89), advocated the deduction from the rate base of Hope's entire book depreciation reserve on the theory that it was built up of annual charges to expense and hence was "contributed by the customers," saying that he could "see no distinction between property which has been constructed by the company through charges upon the consumers by operating expenses labelled, for example, 'well drilling expense' and property which has been constructed by the company through charges upon the consumers by operating expenses labelled 'depreciation and depletion expense'." (Dissenting Opinion, R. I, 83). The Commission, however, recognized that where, as here, a "large part of the Company's business is brought under regulation for the first time" it is improper to deduct the book reserve (Opinion, R. I, 40).

In his concurring opinion Commissioner Manly pointed out the immateriality of past charges in a case such as this (R. I, 77-78):

"Attention should also be directed to the fact that, until the passage of the Federal Power Act in 1935 and the Natural Gas Act in 1938, the depreciation policies of both the electric utilities and the natural gas companies, as regards their interstate operations, were not subject to regulation. Under such conditions, while it is true that the amounts set up on the books as depreciation reserves were derived from revenues collected from customers, they did not, as under regulation, play a determining part in fixing the level of rates and the consequent amount of the revenues. Without regulation, the good old rule of 'What the traffic will bear' is controlling and depreciation policies are an afterthought, determined by the management and board of directors. It follows therefore that, during the pre-regulatory period, the customers would not have contributed any more or less to the company's revenues, regardless of what depreciation program was pursued."

What Commissioner Manly said as to Hope's prior depreciation practices is equally and exactly applicable to Hope's practice as to these well drilling and other costs. What charges it made on its books in the past were wholly immaterial to its customers or to others, and the effect retroactively given them by the Commission is wholly arbitrary.

It should be apparent from the foregoing discussion that the Circuit Court of Appeals was wholly correct in determining that the Commission should not have excluded these wells and similar property from the rate base whether that be fair value or original cost (R. IV, 184-189).

## C. THE RATE BASE ON WHICH THE COMMISSION'S ORDER RESTS DISREGARDS PRESENT VALUE AND IS CONTRARY TO THE NATURAL GAS ACT AND TO CONSTITUTIONAL REQUIREMENTS.

*(Com. Brief, 34-70; Cleve. Brief, 28-38, 56-59)*

### 1. The Commission Ignored the Present Value of Hope's Properties.

As we have seen, *supra*, pages 27 to 30, the Commission started its rate base calculation with the Staff's adjusted book cost of $51,792,000. It thus gave no consideration whatever to the estimates of reproduction cost new presented by the Company or as found by the Ohio Commission, or to the trended original cost. It took no judicial notice of the known increases in price levels during the last forty-five years. In other words it disregarded all evidence of present value and even evidence of the true original cost. Nowhere does it claim that its rate base reflects present value.

The judges below were unanimous in pointing out that the Commission made no attempt to ascertain and paid no attention to the present value of Hope's properties (R. IV, 172, 203).[22]

Before discussing the invalidity of such a rate base under the Natural Gas Act and the Constitution we point out that the Commission's failure to determine whether its rates permitted a fair return on present value cannot be justified on the ground that Hope's evidence was not entitled to any probative value and hence there was no other evidence than book cost. This is not a case in which

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[22] The Commission's brief argues (pp. 43-44) that "There is no evidence that present value is greater than original cost." Quite so. The $69,735,000 original cost of Hope's properties is in excess of their present value, but the Commission's rate base does not use this original cost, or even that part of it included in its adjusted book cost, but deducts a revised depreciation reserve to arrive at a $31,000,000 result which no one can claim or has claimed is anything less than a fraction of the present value of Hope's properties determined on any reasonable basis.

the provision of Section 4(e) of the Natural Gas Act is applicable. It says (15 U. S. C. § 717 c (e)):

> "At any hearing involving a rate or charge *sought to be increased*, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company."

Here Hope sought no increased rate. On the contrary, complaints were filed against Hope's existing rates on the ground that they were unreasonable and in response thereto the Commission began its investigation. It follows that the burden of justifying these charges and supporting any reduced rates was upon the complainants or the Commission, and that the latter could make no order unless sustained by evidence of present value, if it be, as Hope submits, that both the Natural Gas Act and the Constitution require that rates permit a fair return upon present value. In such circumstances and in view of the fact that much of Hope's existing property was built before World War I it was the duty of the Commission or the complainants to introduce evidence of present value of the kind they believed convincing and the duty of the Commission to consider it.

Plainly, as the Circuit Court of Appeals said, it was also the duty of the Commission to take judicial notice of the greatly changed general price level, if present value is to be determined (R. IV, 180-181).

Moreover, the findings that original cost, trended original cost and reproduction cost as presented by Hope are all without "probative value" (see R. I, Findings (7), (8), (9) and (10)) obviously mean no more than that the Commission rejected and disregarded all evidence as to rate base other than the Staff's adjusted book cost. In note 6, page 9, of its Opinion (R. I, 23) the Commission says that under the *Natural Gas Pipeline* decision—

> "such estimates of reproduction cost and trended 'original cost' need not have been admitted in evidence."

We turn then to the question of the validity under the Natural Gas Act and the Constitution of a rate base which is less than present value.

## 2. The Natural Gas Act Requires a Rate Base Not Lower Than Present Value.

*(Com. Brief, 36-39; Cleve. Brief, 28-34)*

Under the Natural Gas Act Congress intended the rate base to be no lower than present value. This most clearly appears in Section 6, which provides as follows (15 U. S. C. Sec. 717e):

> "Ascertainment of Cost of Property"
>
> "Sec. 6 (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, *when found necessary for rate-making purposes, other facts which bear on the determination of* such cost or depreciation and *the fair value of such property.*
>
> "(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction."

It will be observed both from the title and the provisions of this section that it is not limited to rate-making. Both the statement of "original cost" and the determination of "actual legitimate cost" which are referred to in Section 6 may be useful to the Commission for accounting, depreciation and other purposes as well as rate making.

Section 6(a) also authorizes the Commission to investigate and ascertain "when found necessary for rate-making purposes, other facts which bear on the determination of * * * the fair value of such property." Thus when rates are to be fixed the Commission is not only to investigate and ascertain "actual legitimate cost" but

other facts which bear on the determination of the "fair value" of such property. The Commission is thus to determine fair value having before it actual legitimate cost and other facts evidencing fair or present value.

Of these sections the Circuit Court of Appeals said (R. IV, 175):

> "It was clearly the intention of Congress that under these sections the Commission might investigate and ascertain cost and depreciation of properties of natural gas companies, irrespective of whether a rate inquiry was involved or not, and that, where rate making was involved, the investigation might extend to other facts which bear on cost or depreciation and the fair value of the property. Instead of prescribing a change in the method of determining the rate base, it is clear that the statute contemplates that the base should be determined in accordance with existing legal rules; and it is basic in these rules that the present fair value of the property be ascertained so that rates may be established which will afford a fair return upon fair value and so will not be confiscatory in the constitutional sense. This we understand to be the construction given the Act in the recent case of *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. 575, 585, 586, * * *."

The legislative history of the Natural Gas Act supports the construction placed upon it by the Court of Appeals. Appendix A beginning at page 141 of this brief shows the complete legislative history which we shall briefly summarize:

The Public Utility Act of 1935 as originally introduced (Senate Bill 1725 and House Bill 5423, 74th Congress, 1st Session) included a provision as to rate base applicable both to Title II of the Act which was the Federal Power Act and to Title III which regulated natural gas companies. Section 211, subparagraph (a), gave the Commission power to ascertain "the actual, legitimate, prudent cost of the property of every public utility" and subparagraph (c) provided that the Commission "shall fix such rate as will

allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question." As originally introduced it was designed to make prudent investment the rate base.

The Senate Committee on Interstate and Foreign Commerce reported out a revised version of the Public Utility Act of 1935 (S. 2796) omitting Title III, relating to natural gas companies. The section referred to above was renumbered Section 208 and, as introduced and passed by the Senate, still referred only to the "actual legitimate cost of the property." The House Committee on Interstate and Foreign Commerce substantially amended the Senate Bill (S. 2796) and changed what had now become Section 208 of the Federal Power Act to read precisely as Section 6(a) of the Natural Gas Act now reads except that it referred only to electric companies and not to natural-gas companies.

The Chairman of the House Committee in explaining the change in the Senate Bill said (see Appendix A, p. 149 below):

> "After the recent decision of the Supreme Court in a Maryland telephone case it is practically a futile thing, in my judgment, for any legislative body to try to write a rate-making base. * * * we have provided that rates shall be reasonable and just, and under the Supreme Court decision that means that the valuation must be based upon the current value of the property.
>
> "Cost is an element of the rate base, but only an element. The cost of reproduction might be an element, but only an element. The one question is the current value of the property, and the Supreme Court will permit no deviation from this principle." (Congressional Record, Vol. 79, Part 9, p. 10378, 74th Cong., 1st Sess.)

The Maryland telephone case referred to above was *West v. The Chesapeake & Potomac Telephone Co.*, 295 U. S. 662. In that case the Maryland Commission attempted to arrive at a rate base by adjusting historical cost by

means of general commodity price indices. The District Court reversed its order and itself arrived at a rate base by taking the book cost to the time of its determination, deducting the book depreciation reserve and adding an allowance for working capital. This Court held that neither the Commission nor the District Court had arrived at a figure reflecting present value and affirmed the lower court's holding that the order made was confiscatory and invalid.

Certainly the majority opinion adhered to the fair value rule and the minority opinion approving the Maryland Commission's rate base was predicated on the view that the Commission was being condemned for the method it used (trended prices) and not for the confiscatory result. After criticizing replacement value Mr. Justice Stone said, 295 U. S., 692:

> "Present fair value at best is but an estimate. Historical cost appropriately adjusted by reasonable recognition of price trends appears to be quite as common sense a method of arrival at a present theoretical value as any other."

This case was decided immediately prior to the passage of the Federal Power Act. It was a case which the members of the Committees had studied and to which the Chairman of the House Committee expressly referred in the quotation previously given. Not only that but Congressman Cole, a member of the House Committee, in the debate on the bill said (Appendix A, pp. 150-151 below):

> "The bill was originally drawn on the theory that for the purpose of just and reasonable rates the Commission should determine the actual and prudent cost of the property less accrued depreciation thereon. Mr. Justice Roberts, in delivering the opinion of the Court in the Telephone case, *supra*, made it very clear that such a provision would be unconstitutional and it was therefore stricken out. In lieu thereof there is new language and while that may not be entirely clear, it was inconceivable to those of us serving on the sub-

committee that any State or National commission establishing valuation of a public utility for rate purposes should do other than follow the very clear formula or standard now established by the Court. No one consideration alone as to value such as legitimate cost or prudent cost, is sufficient; but all elements must be taken into account, such as reproduction value, actual cost, going value, proper depreciation allowance, so that in the end, after considering the aforegoing and such other elements of value as are essential, leave a figure upon which the rate established thereon will not be confiscatory."

The petitioners apparently consider significant the initial failure of the Senate to adopt Senator Bailey's amendment requiring the use of "fair value" as the rate base (Com. Brief, 38; Cleve. Brief, 30). Clearly this means nothing, since the Bill as passed by the Senate four days later, on June 11, 1935, expressly provided for an actual legitimate cost rate base. Subsequently, in August, 1935, this was changed when the Senate concurred in the House amendment adopting the language in the present act.

To complete this history it only need be added that when the Natural Gas Act was later passed in 1938 Section 6 was taken directly from Section 208 of the Federal Power Act. The only change made was in substituting "natural-gas companies" for "public utilities" which latter meant electric power companies.

Thus it is plain that Congress by Section 6(a) of the Natural Gas Act did not authorize the Commission to fix a rate on the basis of depreciated book cost or depreciated actual legitimate cost, unless those under the circumstances reasonably reflected the present value of the property.

### 3. This Court Has Long Construed the Constitution As Requiring Utility Rates, However Fixed, To Allow at Least a Fair Return on Present Value and That Construction Should Not Be Reversed.

*(Com. Brief, 40-70; Cleve. Brief, 56-59)*

This Court itself has so often considered this matter, and Judge Parker for the Circuit Court of Appeals has so cogently and forcefully stated the legal basis and the reasons for the continuance of the present value rule (R. IV, 172-184) that we do no more than call the Court's attention to the precise issue that is presented and the principal reasons urged by the petitioners for changing the present value rule.

The Circuit Court of Appeals' decision on this point rests on the precise ground that the Commission "could not absolutely ignore the fact of increased price levels" in determining Hope's rates (R. IV, 181). It did not require the Commission to use reproduction cost or trended original cost or any price trends or any other specific formula. The discussion in the Commission's brief (pp. 42-49) under the heading "The Court Below Erred In Requiring That Price Trends Be Utilized in Determining The Rate Base" is beside the point. The Commission was left free to determine present value by any reasonable method it chose, including "investment cost" if this were "a true measure of the present value of the property notwithstanding increases in prices" (R. IV, 180).

#### (a) The Legal Basis of the Present Value Rule Is Sound.

The legal basis of the present value rule rests on three simple propositions:

(1) The property is held in private ownership; (2) the Constitution protects the property, not its cost, against confiscation, and (3) on the analogy of eminent domain there is a taking of property when the owner who is re-

quired to use it up for the public is denied a fair return and depreciation thereon. Those principles have been announced in many cases, most clearly in *The Minnesota Rate Cases*, 230 U. S. 352, remained the legal basis of the rule at the time of adoption of the Natural Gas Act (see *West v. Chesapeake & Potomac Telephone Company*, 295 U. S. 662, 671), and certainly have never been rejected in any subsequent decision.

The petitioners do not deny propositions (1) and (2) but they claim that the analogy of eminent domain is inapplicable to rate regulation which should rest solely on the broader principle underlying other price fixing. It is said that the regulation of rates is not a "taking" but is a mere restriction of the owner's use and enjoyment of his property similar to many other regulations, while "eminent domain is the power to command a sale" (Com. Brief, 60).

Nothing could better describe the regulatory power of the government over utilities such as Hope than the "power to command a sale." While this is not the sole difference, in ordinary price and other regulation of businesses which are not utilities the owner of the business is free to continue the operation of the business, or not, as he sees fit, and is free to sell his commodity, or not, as he sees fit. Not so the utility. It is required by law to continue its business unless the government permits it to stop.[23] It is required

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[23] Natural Gas Act, Section 7(b) (15 U. S. C. Section 717f (b)):

"(b) *No natural-gas company shall abandon all or any portion of its facilities* subject to the jurisdiction of the Commission, *or any service rendered* by means of such facilities, without the permission and approval of the Commission first had and obtained, after due hearing, and a finding by the Commission that the available supply of natural gas is depleted to the extent that the continuance of service is unwarranted, or that the present or future public convenience or necessity permit such abandonment."

(*Continued on next page*)

by law to continue to make sales of its product or service to customers who apply.[24] In this case Hope is certainly commanded to sell its gas. Thereby there is in each year taken for the public use all its property consumed in that service and the use of the remainder, for which just compensation must be paid.

After reviewing the legal basis of the present value rule Judge Parker in this case said (R. IV, 177-178):

> "Property has no value except present value. Past value exists only in memory or in history, future value only in estimate or expectation. It is the property presently existing which belongs to the utility and is used by the public. It is that property which is depreciated through use and which is gradually being sold through depreciation to the public. And it is the value of that property as used which must be consid-

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(*Continued from preceding page*)

Note the mistaken statements denying government compulsion on Hope to continue its service appearing in the Commission brief's footnote 25 (p. 62). The non-eminent domain cases there cited deal with the duty of a father to support his child, the liability of a person who voluntarily undertakes to do something for another, and the liability of a contracting party to a third party beneficiary. They have nothing to do with the legal compulsion on a utility to continue service.

[24] Natural Gas Act, Section 7(a) (15 U. S. C. Section 717f (a)):

> "(a) Whenever the Commission, after notice and opportunity for hearing, finds such action necessary or desirable in the public interest, *it may by order direct a natural-gas company to extend or improve its transportation facilities*, to establish physical connection of its transportation facilities with the facilities of; *and sell natural gas to*, any person or municipality engaged or legally authorized to engage in the local distribution of natural or artificial gas to the public, and for such purpose to extend its transportation facilities to communities immediately adjacent to such facilities or to territory served by such natural-gas company, if the Commission finds that no undue burden will be placed upon such natural-gas company thereby: *Provided*, That the Commission shall have no authority to compel the enlargement of transportation facilities for such purposes, or to compel such natural-gas company to establish physical connection or sell natural gas when to do so would impair its ability to render adequate service to its customers."

ered in fixing rates that will reimburse the company for its partial sale through use and provide an adequate return upon investment. * * * It must not be forgotten that it is the property owned by the utility, and not the cash invested by stockholders in its stock, that is devoted to public use; that this property is worn out in furnishing the service which the public receives and which the utility is bound to render; and that, unless the utility receives a rate sufficient to make necessary replacements at current prices with a fair return upon the present fair value of its investment, its property is being taken from it and given to its customers."

The legal basis of the present value rule including the requirement of just compensation on analogy to the taking of property under the power of eminent domain is sound.

The difficulties in the administration of the present value rule are not due to any unsoundness in this legal basis but are due entirely to another matter. For reasons familiar to all the dollars to be used in a rate base to represent present value can not be determined in the ordinary way. A reasonable substitute is necessary. If it be conceded that the usual formula that has been applied which includes reproduction cost has not always worked well as a measure of present value, that practical difficulty does not justify utter disregard of present value. There is not always an easy road to protection of fundamental civil rights, either of liberty or of property. Certainly it does not justify the usual line of reasoning evidenced throughout the Commission's brief and its Supplement, namely that since reproduction cost has not worked well therefore "prudent investment" should be adopted. An infirmity in a particular method of arriving at the dollars to represent the present value of the property does not change the fundamental legal basis that it is still privately owned and that the Constitution does not permit it to be taken either by way of eminent domain or by compulsory sale through compulsory service without just compensation.

In this connection it may be observed that the method of fixing a rate employed by the Commission in this case is based on a practical denial that the property is privately owned. The theory appears to be that consumers gradually acquire ownership of a utility through depreciation or other charges in the rate and that when these charges equal the cost of the property, no matter how low that cost may have been, the utility is not thereafter entitled either to return or depreciation on that property. Thus it says (Com. Brief, 83):

> "There is no principle which would entitle it [Hope] to a continuing return on an item of property whose cost has been fully recovered from the rates received, and which thus does not represent an investment, even though the property involved remains in use."

That is to say when a company, through depreciation charges or other operating expenses has "recouped" its original cost, from that time forward it is required to continue to operate the properties but is no longer entitled to any return. This is but another way of saying that the property is now owned by consumers and not by the utility.

Nothing this Court said in the *Natural Gas Pipeline* case in any way supports this novel view of the petitioners or denies the common sense legal basis of the present value rule. In fact the rates before this Court in that case had been fixed upon a reproduction cost new rate base.

Nor is there anything to the contrary in *Nebbia v. New York*, 291 U. S. 502 (Com. Brief, 63), which was decided one year earlier than *West v. Chesapeake & Potomac Telephone Company, supra*, page 57. The opinion of the Court in each case was written by Mr. Justice Roberts and neither his opinion in the latter case nor that of the minority found any necessity for even referring to the *Nebbia* case. The controlling principles in the two cases are obviously different. In the *Nebbia* case no maximum price was fixed, but merely a minimum price, and so far as the governmental

regulation was concerned, anyone was free at will to charge more than this minimum price or not to sell at all. This distinction was clearly pointed out in the related case of *Hegeman Farms Corp. v. Baldwin*, 293 U. S. 163, where Mr. Justice Cardozo said:

> "* * * For an understanding of the complainant's position both in its economic and in its legal aspects, the fact is of critical importance that there has been no attempt by the Board to fix a maximum price in respect of any of the transactions subject to its regulatory power. What is fixed is a minimum only. None the less, the competition among dealers is so keen that in practice the legal minimum is the maximum that the appellant is able to charge. * * *" (p. 169)
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> "* * * The Fourteenth Amendment does not protect a business against the hazards of competition. *Public Service Comm'n v. Great Northern Utilities Co., supra*, at p. 135. It is from hazards of that order, and not from restraints of law capriciously imposed, that the appellant seeks relief. The refuge from its ills is not in constitutional immunities.
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> Much is made of a supposed analogy between the plight in which the appellant finds itself and that of public utilities subjected to maximum rates that do not yield a fair return. But the analogy, when scrutinized, is seen to be unreal. A public utility in such circumstances has no outlet of escape. If it is running its business with reasonable economy, it must break the law or bleed to death. But that is not the alternative offered where the law prescribes a minimum. An outlet is then available to the regulated business, an outlet that presumably will be utilized whenever use becomes expedient. If the price is not raised, the reason must be that efficient operators find that they can get along without a change. * * *" (pp. 170-171)

None of the other cases cited by the petitioners support their view that utility rates are constitutionally "reasonable" and not "arbitrary" when they produce less than a fair return on present value. These cases deal with oleomargarine, smoke control, obstructions upon navigable

waters, fish conservation, fire prevention, rationing and the like[25] (Com. Brief, 60-63; Cleve. Brief, 56-59). We know of no case where *maximum* prices have been fixed and it has not been held that upon judicial test inquiry should be made whether just compensation is allowed, except perhaps in war emergency anti-inflationary price regulation where no requirement is made that the vendor continue to sell. Cf. *Wilson v. Brown*, 11 Pike and Fischer OPA Service 612:17 (Emergency Court of Appeals, July 15, 1943).

**(b) Considerations Urged by The Commission to Justify the Application of its Particular Rate Making Theories Regardless of Whether its Rates Allow a Fair Return on Present Value Are Unsound.**

The Commission insists that it be permitted to use depreciated original cost even where it can not on any reasonable basis find that the resulting rate base is at least equivalent to present value or that its resulting rate is sufficient to allow at least a fair return on present value. In the case of utilities constructed in whole or in large part at the higher level of prices prevailing since World War I present value and depreciated original cost will frequently coincide for all substantial purposes. The Commission, however, insists upon the right to say that even when this is not true depreciated past costs shall control. To cite an extreme case, it insists that if Manhattan Island

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[25] Oleomargarine—*Powell v. Pennsylvania*, 127 U. S. 678; Smoke Control—*Northwestern Laundry v. Des Moines*, 239 U. S. 486; Obstruction upon Navigable Waters—*Monongahela Bridge Co. v. United States*, 216 U. S. 177, *Union Bridge Co. v. United States*, 204 U. S. 364, *West Chicago Street Railroad Co. v. Chicago*, 201 U. S. 506; Fish Conservation—*Lawton v. Steele*, 152 U. S. 133; Fire Prevention—*Standard Oil Co. v. Maryville*, 279 U. S. 582; Rationing—*Henderson v. Bryan*, 46 F. Supp. 682; *Morrisdale Coal Co. v. United States*, 259 U. S. 188; Zoning—*Euclid v. Ambler Co.*, 272 U. S. 365; Tree Conservation—*Miller v. Schoene*, 276 U. S. 272; Intoxicating Liquor—*Mugler v. Kansas*, 123 U. S. 623; Bricks—*Hadacheck v. Los Angeles*, 239 U. S. 394; Livery Stable—*Reinman v. Little Rock*, 237 U. S. 171; Right of Support—*Pennsylvania Coal Co. v. Mahon*, 260 U. S. 393.

had been acquired from the Indians by a utility and continuously thereafter devoted to public service, it could now go into the rate base at $24.

In support of this view it urges a number of considerations (Com. Brief, 64-70; Com. Brief's Supplement, 66-89) under the proposition that "We submit that an acceptable and reasonable formula is the prudent investment standard adopted by the Commission" (Com. Brief, 64).

It is important to note that the "prudent investment standard" and the "prudent investment basis of rate regulation," as these terms are used by the various writers cited in the Commission's brief and in its Supplement, are not descriptive of the rate base and method of fixing rates which the Commission in fact employed in the present case. This fact is perfectly illustrated by the Commission's repeated references to experience in Massachusetts and California as demonstrating that its own mislabelled rate making theories are "sound and workable" and have been adopted by "many experienced regulatory bodies" (Com. Brief, 65). To this experience we first turn.

(1) **Experience.** While the phrase "prudent investment" originated in Massachusetts[26] the fact is that Massachusetts has never applied what various writers now call the prudent investment method of regulating rates, and it has certainly never applied the theories which the Commission applied in the present case.

Professor Irston Barnes in his book "*Public Utility Control in Massachusetts*," from which citations are made below, analyzed the claims as to the success of the Massachusetts system. He found:

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[26] The term "prudent investment" originated in Massachusetts because the Commission of that state fixed rates on the amount of money stockholders had "honestly and prudently invested" in a utility although this was more than the then value of its property. In other words, the phrase was coined to justify including in rate base sums in excess of present value, and not vice versa. Wells, *Proceedings of the N. A. R. U. C.*, 1927, pp. 113-114.

(a) In practice the Massachusetts Commission has rarely determined either the prudent investment or any other rate base and nowhere explains how to do it (*Ibid.*, pp. 105, 106, 118, 143, 145, 147, 149).

(b) The small amount of litigation involving the Massachusetts Commission decisions is due to the extremely liberal treatment usually accorded utilities in that state. Of this Professor Barnes says:

> "The normal conclusion must be that the utilities have in the past received more liberal treatment from the Massachusetts Commissions than they could have expected from an appeal to the Federal Courts" (*Ibid.*, p. 206; also pp. 138, 139.)

(c) The outstanding characteristic of Massachusetts regulation is its method of determining fair return. The Massachusetts law requires a utility to sell stock to finance its requirements at not less than par. The result of this has been that the Massachusetts Commission has allowed utilities to earn sufficient money so that their stocks will sell always above par. Professor Barnes says "usually from 20 to 25 points above." (*Ibid.*, p. 154, also pp. 155, 173, 213.)

It is apparent from this statement that however successful the Massachusetts method may be it is not in any sense an application of the method used by the Commission in this case.

California has often been referred to in this Court and elsewhere as the leading exponent of the prudent investment method of regulating rates. We say regulating rates because as will be developed the prudent investment doctrine is not merely a method of determining rate base but a method of determining rates in such a manner as to avoid as many as possible of the troublesome disputes that have plagued rate litigation.

As to the California method it is thus stated by the California Commission:

"During its entire history in establishing reasonable rates for utilities similar to this company, to determine a proper rate base this Commission has used the *actual* or *estimated historical costs* of the properties *undepreciated*, with *land at the present market value*. Consistent with this, it has used the sinking fund method to determine the allowance for depreciation to be included in operating expenses.

"This historical method has dominated the Commission's findings for several principal reasons." (quoted in *Railroad Commission of California v. Pacific Gas & Electric Co.*, 302 U. S. 388, 395.)

As to the reasons for using an undepreciated rate base and the sinking fund method of determining the annual allowance for depreciation expense, the California Commission says:

"As this Commission has frequently pointed out, such conflicts and inconsistencies as have been discussed herein in the treatment of depreciation in rate cases may be avoided by the use of the sinking fund method. No estimate of the highly controversial issue of accrued depreciation is needed in this method, the undepreciated property value being used as the base. The amounts accrued are in most properties, as in this Company, invested in the property and with a reasonable interest return thereon are sufficient to replace the property at the end of its estimated useful life. The method has been followed for many years by this Commission." (*Los Angeles v. Southern California Telephone Company*, 39 Cal. R. Com. 739, 14 P. U. R. (N. S.) 252, 275 (1936).)

It will thus be observed that the rate base is the actual or, if necessary, the estimated historical cost undepreciated with land at market value. On this the full rate of return is allowed. In addition there is included in operating expenses an allowance for depreciation calculated on the sinking fund method.

As to the amount of the annual depreciation allowance, the California Commission has said:

"The depreciation annuity which this Commission found reasonable in 1916 was equal to 1.54 per cent of the rate base excluding materials and supplies and working cash capital. The depreciation annuity which has been allowed by the Commission in the various decisions since then has averaged practically the same amount. The depreciation annuity so determined is based upon a 6 per cent sinking fund and represents the estimated amount which, set aside annually with compound interest at 6 per cent, will be sufficient to cover the original cost of the various units of property at the expiration of their probable life." *San Joaquin Light & Power Corporation*, 21 Cal. R. Com. 545, P. U. R. 1922D 595, 625 (1922).

In more recent cases the allowances have substantially conformed with this 1½% (See *Pacific Gas & Electric Company*, 39 Cal. R. Com. 49, 1 P. U. R. (N. S.) 1 (1933); *Los Angeles v. Southern California Telephone Company*, 39 Cal. R. Com. 739, 14 P. U. R. (N. S.) 252 (1936)).

As to the rate of return the California Commission early adopted this principle:

"The Commission in fixing a rate of return must be liberal, lest too strict a policy result in turning capital to other fields of enterprise. California needs development by public utilities, and this Commission's policy should be a broad and liberal one, so as to encourage capital to develop the state by legitimate public utility enterprises where needed." (*City of Palo Alto v. Palo Alto Gas Company*, 2 Cal. R. Com. 300, 317-318 (1913).)

In applying this policy it has always given great weight to the historical cost to the utility of its capital but has added something to cost for profit. In justification of this the Commission has said:

"In this consideration, the same logic that justifies consideration of the reasonable historical cost of property for a utility such as this one, as the fairer basis for determination of rates, applies as well to the question of fair return. If the reasonable historical cost shall be used as the rate base, then it is apparent that

a fair return determined on the basis of present yield of securities, as suggested by Dr. Maltbie, is not applicable. Greater consideration should be given to the historical cost of moneys, though this alone should not be the measure." (*Application of Pacific Telephone and Telegraph Company*, 33 Cal. R. Com. 737, 772-773, P. U. R. 1930C 481, 513 (1929).)

As to the amount of this return the Commission, writing in 1921, said:

"The Commission in fixing rates for utilities, such as applicant, has generally found that 8 per cent was a reasonable return under conditions prior to 1918. Since January 1, 1918, money invested in property of this applicant has cost from 7 per cent to 8 per cent, and if a utility is to continue to meet its obligations and attract capital it must be expected that some profit on its enterprise be allowed in addition to the bare cost of the money invested. If we consider a return of 8 per cent as reasonable upon money invested prior to January, 1918, and 9 per cent on the money invested since that time, we find that the average rate of return upon the present investment in operative property in 1921 would be 8.3 per cent, * * *." (*Application of Southern California Edison Company*, 19 Cal. R. Com., 595, 603, P. U. R. 1921D 63, 75.)

Consistent with its theory the California Commission in recent years has fixed a somewhat lower rate of return than formerly although we know of no case in which it went below 7% on the undepreciated historical cost and this in the case of the *Pacific Telephone and Telegraph Company*, 33 Cal. R. Com. 737, P. U. R. 1930D 481 (1929).

Thus the essential features of the California method are these:

(1) An undepreciated historical cost rate base; actual if possible, estimated if necessary.

(2) Annual depreciation expense fixed on a sinking fund method at a sinking fund rate somewhat lower than the rate of return. Thus, the interest charge on the depre-

ciation reserve must be added to the reserve by the utility from its return.

(3) A liberal rate of return somewhat above the historical cost of capital to the utility.

This we suggest is the prudent investment method of regulating rates which Mr. Justice Brandeis advocated in his classic exposition in the *Southwestern Bell Telephone* case. His rate base was to be original cost corrected by historical cost if necessary, and presumably undepreciated since he did not mention depreciation and since his principal object was to avoid as many as possible of the troublesome questions in rate-making. Of equal importance in his mind was the fact that the rate of return was to be determined on the basis of the capital cost of money to the utility and not on the basis of costs current at the time of regulation. (*State of Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission*, 262 U. S. 276, 304-308 (Brandeis, J., concurring).)

As an illustration of the California method we take the case of *Los Angeles Gas & Electric Company v. Railroad Commission*, 289 U. S. 287.[27]

The Commission found a historical cost of $60,700,000. This was made up of a rate base established by the Commission in 1917 "upon a valuation made by the Commission's engineers as of October, 1915" (p. 292) to which was added net additions and betterments as entered upon the company's books. Land was taken at current values (pp. 292-293). No accrued depreciation was deducted. Both the Commission and the company introduced evidence of reproduction cost and accrued depreciation and on the basis of this evidence the Commission found a fair value (undepreciated) of $65,500,000 (p. 298).

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[27] In the dissenting opinion of Mr. Justice Stone in *West v. The Chesapeake & Potomac Telephone Co.*, 295 U. S. 662, at 693, this case was referred to as one in which the California Commission "made its valuation on the basis of prudent investment."

As a depreciation annuity the Commission allowed $1,072,000 equivalent to 1.7% of the historical cost rate base (p. 303).

By way of return the Commission allowed a sum equal to 7.7% on the historical cost rate base or 7% on the fair value rate base, both undepreciated (p. 292). While the company was engaged in both the natural gas and electric business it was the natural gas property that was involved in this case.

As we develop later in this brief, if the California method were properly applied to Hope its rate base would have been double that used by the Commission and its permissible earnings more than double (*infra*, pp. 114-115). For present purposes we content ourselves with pointing out that the Commission method of regulating rates does not bear the slightest resemblance to the prudent investment method of Mr. Justice Brandeis or as practiced in California. It does not take an undepreciated rate base. It purports to estimate accrued depreciation and in this case has grossly over-estimated it. It does not recognize the historical cost of money but fixes the rate of return on a basis that is less than current cost of capital to natural gas companies.

The only additional experience cited in the Commission's brief is that of the Commission itself and so far, except for Hope, it has dealt only with companies like its water power licensees or with the western natural gas pipe line companies. All of these properties have been constructed within recent years and at price levels where original cost will approximate a fair reproduction cost.

We submit that there is no experience anywhere under the rate-making method used by the Commission in this case.

(2) **Accuracy**. The Commission argues that its depreciated cost rate base can be determined "expeditiously, accurately, and to a degree of exactness that leaves

substantially little ground for conflict" (Com. Brief, 65). In this case the parties are in violent conflict over original cost and over the determination of accrued depreciation. While here there is no question but that all expenditures were prudently made it is not idle prophecy that violent and prolonged conflict could easily arise over that issue. In fact such an issue appeared in the case of the manufactured gas equipment in the *Los Angeles Gas* case, *supra*, page 72. Indeed the necessity for determining today whether a certain action was prudent at a prior time, from which hindsight cannot be wholly excluded, is bound to result in numerous controversies.

Moreover the dollars that will be set down for original cost with such "delusive exactness"[28] will not state with even remote accuracy the true or economic cost of the property or the sacrifice the owner made to construct it. Certainly the dollar is not what it used to be in exchange value or in purchasing power. Only its symbol remains the same.[29] When, therefore we set down the figures as

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[28] Mr. Justice Holmes in *City of Louisville v. Cumberland Telephone and Telegraph Co.*, 225 U. S. 430, 436.

[29] For nearly 100 years prior to 1933 a dollar was the right to receive 23.22 grains of fine gold. The exchange value of that gold expressed in other commodities has varied widely over the years due principally to fluctuations of other commodities, but to some extent due to fluctuation of gold. In 1933 the quantity of gold in a dollar was changed to 15-5/21 grains, only .9 fine. More recently when specie payment was suspended it ceased to be the right to receive anything in gold. Whether the dollar of the future will be tied to gold or to commodities no one can say.

It is clear that for every dollar Hope spent in the construction of property prior to World War I it gave up the right to demand 23.22 grains of fine gold. The physical properties for which it exchanged this right to gold were placed at the service of the public. What justification would there be for measuring Hope's rights by the fluctuating value of fine gold which Hope exchanged for its property, instead of measuring it directly by the present value of the land, pipe, and other property for which Hope made the exchange? The pipe, not the gold, is devoted to

(*Continued on next page*)

to dollars originally spent in the construction of Hope's property in every year from 1898 to date it gives an appearance of accuracy when in fact it merely represents widely varying exchange values of the dollar over a long period of years.

The truth is that it is no more difficult to estimate with substantial fairness the present value of the property devoted to service than it is to estimate the present economic value of the original dollars that were exchanged for the property. *To use merely the sum of the dollars originally spent, in utter disregard of their economic value, is merely to avoid and not to solve the problem.* Certainly Constitutional protection of property rights disappears if the courts shut their eyes to what every man on the street knows—that the dollar today is worth only 50¢ of the dollar several decades ago and that the dollar of the future may be worth even less.

(3) **Stability.** The Commission argues that original cost provides a stable rate base (Com. Brief, 66) and that this stability will appeal to investors. We suggest "inflexibility" is a more suitable word than "stability" to describe this attribute.

Rates have been fixed on the basis of present value for about 50 years. We know from this experience that this method has attracted capital to public utility enterprises until today they are more fully developed in the United States than in any other part of the world. The cost of service is lower here than in any other part of the world. Securities of public utilities have attracted both private and

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public service. But the original cost basis does not even measure Hope's rights by the dollars it exchanged, which represented 23.22 grains of fine gold, nor yet by the dollars represented by 15.15/21 grains of gold, not so fine, but by present day dollars that have much less exchange value than even 15 grains of gold. (See article in forthcoming (October) issue of *Michigan Law Review* by Thomas L. Long of Detroit.)

institutional investors to the extent of many billions of dollars. It would, of course, be as wrong to claim that this is all due to the present value rule as it would be to claim that the present value rule had no part in this development.

One reason, we suggest, for the persistence of the rule through periods of depression and prosperity has been its flexibility. The Commission now proposes to substitute for this an absolutely inflexible rule, to be applied to all utilities, electric, gas or other, old or young, which it is said will always be fair to both consumer and investors and will protect the consumers from paying more than a return on investment and the investors from "depreciation in value during times of depression."

Here is defiance to ordinary economic laws. If deflation occurs and prices go down the utility is still to have a rate base higher than the current value of its property. This can only mean that consumers in such periods are to pay the same dollars as before, although they have fewer dollars and should pay less. On the other hand, if prices rise the consumer is to be protected from paying higher rates even though his wages have risen along with all other prices. This means utilities and their owners, at a time when the consumers are fully able to pay higher rates, must nevertheless suffer.

If we are practical we recognize that over a long period of years, in spite of periods of deflation followed by periods of inflation, the world wide trend of prices has been up. Part of every inflation becomes permanent. But suppose, as many well informed persons now fear, with an already high level of prices we have further serious inflation. In the case of a utility plant it now costs about $2 to build what prior to World War I was built for $1 (Ex. 20, R. I, 207, col. (6)). Suppose in the future it takes $5.

Under these circumstances the rigid rate base based on the $1 and $2 costs would effectively destroy a large part

of the present investment in the public utility industry. There is no way out. If the owners of utility equities—and this includes not only millions of private investors but insurance companies, banks, colleges and other institutional investors—are only permitted the opportunity to earn on the number of dollars originally invested at a time when those dollars have only 1/5th or 2/5ths of their former purchasing power, the effect will be to reduce the value of all such investments by 4/5ths or 3/5ths.

The truth is that this so-called "stability" in the original cost rate base is not a virtue but one of its most serious vices. It is a strait-jacket, which is never a cure.

Public utilities in the future will have to do business on the basis of the future value of the dollar. It is these dollars that they will collect from their customers and that they will use for the payment of wages, operating expenses, taxes and other charges. It is with these dollars that they will have to replace worn out property. If replacement costs are two or three times original cost and the utility's annual allowance for depreciation has been based only on original cost, then the utility must either sell capital securities merely to keep going, if it can, or face bankruptcy. Under such circumstances there is not the slightest justification for requiring the owners of utilities to get a return based on pre-World War I dollars or on any other than those currently in use in the commercial world.

Plainly a strait-jacket on a rate base in an economic system where prices and values are constantly fluctuating is neither desirable nor reasonable.

(4) **Investor Appeal.** The Commission argues (Com. Brief, 66):

> "A basis of rate regulation which maintains the Company's financial integrity and permits it to raise the required capital cannot be deemed arbitrary."

No support of any kind is given for this assumption as to financial stability except a reference to practical experience

in California and Massachusetts. As we have seen, *supra*, pages 67 to 73, the method of rate regulation in California and Massachusetts is so wholly unlike anything the Commission has done in this case that successful experience there gives no support to the Commission's theories in this case.

The Commission's statement, however, recognizes what this Court has always recognized, namely that any scheme of rate regulation that will not continue to attract private capital to public utilities is unreasonable and must fail.

We know from long and successful experience that the present value rule has attracted capital to public utility enterprises at reasonable costs. What assurance does the Commission's method as applied in this case give that it will continue this record?

To simplify the problem let us consider the position of an individual who is contemplating the construction of a public utility. He will be told that that part of his dollars afterwards judged to have been "legitimately" spent will be included in the rate base; that the rate base will never reflect changes in price levels either up or down; and that on that rate base he will be entitled to receive a return and an allowance for depreciation, if successful operation permits rates high enough to cover those amounts. According to the further theory of the Commission in this case, when the total depreciation charged equals the cost of the property he will thereafter no longer be entitled to any return or depreciation (Com. Brief, 83, 105-106).

What he will be told about the measure of the rate of return is not clear. The Commission's brief advocates a rate of return based on "current costs of capital" on page 66, but in a note on page 67 it says:

> "And if some account must be taken of the factor of increasing prices as bearing upon the instability of investment, this may readily be accomplished by altering the rate of return."

In the present case, however, the Commission actually fixed a low rate of return on the basis of current costs of capital and disregarded the greatly increased price level.

Thus on the Commission's theory as here applied (1) the utility owner will be permitted, if he can, to earn a return on the dollars invested, less accrued depreciation, and (2) at a rate of return based on future money market conditions. The utility owner has not the slightest chance for a profit to compensate him for the risks of loss that he runs.

He is asked to lend his money without any obligation or security for the payment of interest (return) or for the repayment of principal. He will get his return and a restoration of that part of his investment "legitimately" made only if the enterprise is successful. By no possibility can he get more than his investment, plus return and he may lose it all as did many investors in interurban and street railways.

It does no good to argue that a public utility with a return of 6½% can issue bonds at 3% and thus pay a much larger return upon its common stock. Every dollar issued in bonds increases the risk of the common stock and so increases the return necessary on it. The rate of return is fixed having in mind the over-all cost of capital to the particular utility including money raised by the sale of bonds and the sale of preferred and common stocks. For purposes of present argument we must assume that the rate will fairly represent the composite risk of all. So considered this Commission theory assumes that an investor in common stocks will accept the terms of a bond *minus* the security that a bond offers and *minus* any obligation either to return his money at any time or to pay a stipulated return.

He can not even contemplate a continuance of the rate of return upon the basis of which he was originally asked to supply funds. His unsecured investment is subject to the still further risk of a future reduction in rate of return

based on then current money rates, which when applied to a then depreciated dollar gives him but a fraction of the economic return he anticipated when he originally advanced his more valuable dollar.

That money, particularly equity money, will not continue to flow into public utility enterprises on any such bases seems too obvious for controversy. Commissions and courts can control rate base, rate of return and allowable operating expenses, but they cannot control the economic laws that regulate the flow of money into new or old enterprises. If the terms they impose are not satisfactory to the investing public the money will not be forthcoming. It will go into other channels.

There is no experience that indicates, and there is not the slightest ground for the belief, that private investors will continue to supply the equity money for public utilities whose rates are regulated on the theory here applied by the Commission. The imposition of any such method of rate regulation as here advocated in the end means either government financing or government ownership of public utilities.

### D. THE COMMISSION ARBITRARILY DEDUCTED IN ITS RATE BASE MORE FOR ACCRUED DEPLETION AND DEPRECIATION THAN EXISTED IN FACT.

*(Com. Brief, 89-99; Cleve. Brief, 46-52)*

As we have seen, the prudent investment method of rate making as employed in Massachusetts and California does not call for deduction of accrued or existing depreciation in determining the rate base. Such a deduction is of course a necessary step in determining the present value of utility property (R. IV, 189) which the Commission never undertook to do. Nevertheless it did make a large deduction for accrued depreciation (Opinion, R. I, 36).

Both the petitioners state the fundamental question on this point to be whether the Commission's "method" of determining actual existing depreciation is reasonable

(Com. Brief, 4, 89; Cleve. Brief, 8, 20, 47). The true issue obviously is the reasonableness of the Commission's *results*, as the Circuit Court of Appeals held (R. IV, 189-193). Anything deducted by the Commission in arriving at its rate base in excess of the depletion and depreciation existing in fact in Hope's properties plainly confiscates them.

There was no disagreement between the parties as to the underlying principles of depreciation that should be applied: that true depreciation is the extent to which the service or economic life of the property has been consumed, and that accrued and annual depreciation must be harmonized. The petitioners' general discussion of these principles is purely of academic interest, since all parties agreed upon them and Hope applied them.[30]

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[30] This was clearly developed at the hearings:

"The Witness: [Rhodes] Well, in general, the methods followed by the Commission and the methods followed by me differ only as to the order of procedure. The Commission first found depreciation rates—

By Mr. Cockley:

"Q. (Interposing) You mean the Commission's Staff?

"A. Yes, the Commission's staff first found rates of depreciation, and then from these rates of depreciation they computed accrued depreciation of the property.

"In my work I determined directly the accrued depreciation in the property, and I computed the rates of depreciation required by the Company to meet its losses.

"Both methods, when correctly applied, use accepted accounting procedure.

"Q. Now will you tell us why you chose the method you did, rather than the method that the Commission used or the Commission's staff used?

"A. There were a number of reasons for my choice, the principal one of which was that since I was primarily interested in determining accrued depreciation in the property, I determined it directly from measured and observed facts.

"The Commission's method is based upon determining service life, largely a matter of judgment not supported by facts in the Company's experience. There is no mortality experience that means much in property such as Hope's natural gas property.

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This Court has already called attention to the inherent difficulties of determining actual accrued depreciation by the Commission's roundabout method of estimating service lives and then using them to compute a depreciation reserve. In *Lindheimer v. Illinois Bell Telephone Company*, 292 U. S. 151, 168, it said:

> "If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods."

It then went on to say that the burden of showing the correctness of the depreciation allowances arrived at by the Telephone Company on that method—

> "'• • • is not sustained by proof that its general accounting system has been correct. The calculations are mathematical but the predictions underlying them are essentially matters of opinion. They proceed from studies of the 'behavior of large groups' of items. These studies are beset with a host of perplexing problems. Their determination involves the examination of many variable elements, and opportunities for excessive allowances, even under a correct system of accounting, are always present. The necessity of check-

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"Furthermore, in starting from a judgment figure, the computing of the accrued depreciation in the property magnifies any errors in accounting procedure or any difference between the accounting procedure followed by the Company and that which somebody now thinks it should have followed.

"When accrued depreciation in the property is directly determined from the property itself, the property and the condition of the property is the test of the method; *but when the depreciation in the property is calculated by the roundabout method of judging as to the service life and going through 40 years of accounting records, the only test of the correctness of the Commission's result is whether or not it compares with the facts which can be found by examining the property.*

"I ascertained those facts first, by my method, and that is the reason I chose it." (Tr. 5239-5241).

ing the results is not questioned. The predictions must meet the controlling test of experience.

"In this instance, the evidence of expert computations of the amounts required for annual allowances does not stand alone. In striking contrast is the proof of the actual condition of the plant as maintained— * * *." (292 U. S., 169-170.)

This Court then concluded that the annual depreciation charges determined by that straight line method and the resulting depreciation reserve were erroneous, when so tested by comparison with the actual condition of the plant—"in the face of the disparity between the actual extent of depreciation, as ascertained according to the comprehensive standards used by the Company's witnesses, and the amount of depreciation reserve" (292 U. S., 174-175).

This necessary check upon the *results* reached by the Commission's Staff was never made. The various Staff members worked separately on the various separate parts of the formula set up for them to follow (*supra*, pp. 26 to 27). No Staff witness reviewed the results and testified that they in fact reflected accurately the accrued depreciation and depletion now existing in Hope's property. This is astonishing but true. A check of results would of course have disclosed the errors in service lives and of application of the method (*supra*, pp. 26 and 27) which produced the arbitrary results next referred to. All any of the Commission witnesses ever claimed is that the general *method* they used was a good one, and this is all the briefs of the petitioners say here.

Had the Commission checked the *results* of its Staff's work, as the court below did, instead of being concerned only with general principles and general methods (Opinion, R. I, 36-46), it would have discovered the following among other grossly arbitrary and unreasonable results:

(1) Hope's well equipment, having an adjusted book cost of $7,610,510 at the end of 1938, the Staff depreciated

to a net book cost of $3,227,807 (Ex. 61, R. III, 189, 191). Only 42.4% of the book cost thus went in the rate base. This is less than the salvage value of that equipment, which over the past ten years has amounted to 65.2% of the book cost (Ex. 21, 4-5). *In other words, the Staff wrote down the book cost of Hope's well equipment to less than two-thirds of its salvage value as established over a long period of years.* So gross was this error that the Commission in its Opinion corrected it in part by recognizing that the depreciation rates used in its calculations were excessive and, consequently, reducing its "Accrued Depreciation" by $566,771 (Opinion, R. I, 44). However, even after this partial correction the Commission's "rate base" for Hope's well equipment is only three-fourths of the book cost of the salvage which Hope has been obtaining from its wells.[31]

This "rate base" is of course an even smaller fraction of the salvage of well equipment in terms of present prices.

(2) In the case of field line equipment having a book cost of $7,934,169 at the end of 1938, the Commission's "accrued depreciation" deducted from its adjusted book cost leaves a net book cost or "rate base" of only $4,088,602, or 51.5% of the book cost (Ex. 61, R. III, 189, 191). Hope's actual experience in gross salvage of field line equipment has been 56.7% over the past ten years (Ex. 24, 26). *Thus, the Commission has written down all of Hope's field line pipe to less than the gross salvage value of this pipe on a book cost basis as established by Hope's actual experience.*

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[31] Actually after deduction of the Commission's hypothetical reserve for future well abandoning costs, *infra*, pp. 86-87, the Commission allowed in Hope's rate base only $1,687,300 or 22.2% of its adjusted book cost of Hope's well equipment for 3300 wells. This amount compares with Hope's $6,133,000 or 56% net present value after deducting well abandoning costs (Ex. 124, R. III, 204), with which Cleveland's brief (pp. 50-51) says comparison should properly be made.

On the basis of current pipe prices, rather than the prices Hope paid years ago, the Commission's "rate base" for field line pipe would, of course, be very substantially less than the present salvage value of this pipe.

(3) In the case of compressor station equipment having a book cost of $7,683,672 at the end of 1938, the Commission has deducted "accrued depreciation" so as to leave a net book cost or "rate base" of $4,579,853, or only 59.6% of the book cost (Ex. 61, R. III, 192, 194). Hope's actual experience in gross salvage on compressor station equipment has averaged 56.4% over the past ten years (Ex. 24, 29). *Thus, the Commission has used as a rate base for Hope's compressor station equipment only a few dollars more than the gross book salvage value of this equipment.*

On the basis of the higher current prices for compressor station material it is obvious that the Commission has used no more than salvage value for this equipment.

(4) On properties purchased by Hope from prior utilities the Staff and the Commission assumed, without any investigation, that whatever depreciation reserves the prior utilities had set up on their books accurately represented the accrued depreciation on those properties as of the date of their purchase by Hope. By using these reserves as set up by predecessor utilities *instead of reserves accumulated at the Staff's own annual depreciation rates applied to these purchased properties*, the Staff, and the Commission in its Opinion, overstated its "Reserve Requirement" or "Actual Existing Depreciation," and understated its "rate base," by $743,927 (Ex. 137, 3, Tr. 2917, 6502).

(5) On communication equipment, i.e., telephone lines and equipment, having an adjusted book cost as of the end of 1938 of approximately $250,000 the Staff, and the Commission in its Opinion, deducted an "Adjusted Depreciation Reserve" of $185,000. It was admitted by Commission witness Dunn that this reserve was sufficient to take care of all the past retirements of communication equipment

property that had ever occurred over Hope's entire history from 1898 on (Tr. 3781-3782), and that if he had been able to get all of the actual retirements in the past he would have deducted them from his computed reserve, but these figures not being available he did not do so (Tr. 3782-3783). In other words his "accrued depreciation" includes the depreciation not only in the existing property but in all of the property of this sort Hope has ever had, including that retired from service during the past 40 years.

(6) The Commission deducted from the book cost of Hope's properties as a part of its "Adjusted Depletion Reserves" the sum of $2,107,261 for what is labeled "Cost of Abandoning Gas Wells" (Ex. 61, R. III, 188). This cost is one that is incurred by Hope for cementing in and plugging wells in accordance with West Virginia laws at the time they are abandoned. The cost of this is an operating expense when abandonment occurs and has nothing whatever to do with depreciation or depletion of book costs or any other costs as the Staff admitted (Dunn, R. II, 512-513).

The $2,107,261 represents a hypothetical reserve which the Commission claimed Hope should have set up in the past for the future cost of abandoning *all* of its present 3300 gas wells. It was not limited to the 772 wells whose drilling cost was included in the Commission's adjusted book cost. The Commission has thus in this instance reversed Hope's former accounting practice and set up a capital account in place of an operating expense.

From the very beginning of operations Hope, in accordance with accounting practice that was admittedly good then and still is (Dunn, R. II, 512), charged the cost of abandoning gas wells to operating expenses when wells were actually abandoned (R. II, 511-512). In fact it was required so to do by the 1923 West Virginia code of accounts (R. II, 511-512) and until West Virginia's present code became effective in 1939.

Nevertheless, because the Commission's new Uniform System of Accounts now requires that a reserve be set up each year for future well abandoning costs, the Staff assumed that Hope should have set one up for this purpose in the past (R. II, 515, 518). In this case Hope's past accounting practices as to all well abandonments are not to be "frozen," although as to well drilling costs they are (*supra*, p. 41). Here again is an inconsistency by the Commission in applying its accounting theories which is arbitrary and unreasonable.

Of course in determining the present value of property the economic encumbrance of future abandoning costs must be recognized and the Circuit Court of Appeals, we believe, properly so held (R. IV, 192-193). In determining the present value of Hope's approximately 3300 wells Hope did deduct future abandoning costs from the present depreciated value of the equipment in these 3300 wells. But the Commission's rate-fixing method is not concerned with property now in existence or with present day values—hence it should not have been concerned with this encumbrance on present value.

It will be observed that the Commission's brief does not attempt to defend the results reached by the Commission. Instead, it is stated in a footnote (p. 94) that the Circuit Court of Appeals overlooked the inspection of Hope's properties made by Commission engineer French as an aid in arriving at his estimated service lives. This inspection was called to the court's attention in the Commission's brief before that court (p. 58), but the court knew from the record that neither Mr. French nor any other Commission witness ever testified that the Staff's results in fact reflected the actual depreciation in Hope's property as checked by this inspection or any others.

There is also a footnote criticism (Com. Brief, 95) of the Circuit Court of Appeals' use of the term "salvage value." The fact is that the court used this term precise-

ly in accordance with the Commission's own Uniform System of Accounts which defines it as follows (Ex. 58, R. III, 44):

> "34. 'Salvage value' means the amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale; *or, if retained, the amount at which the material recoverable is chargeable to Account 131, Materials and Supplies, or other appropriate account.*"

Thus the Commission specifically directs that recoverable material *retained* by a gas company in connection with "property which has been *removed*" be treated as salvage—which, of course, it is.

The point involved is not, however, one of definition but of practical conception of what result the Commission reached. The Commission wrote down *all* of Hope's existing well equipment for 3300 wells, and its 3000 miles of field line pipe to substantially less than the book cost of that *part* of all this well equipment and line pipe which Hope's actual experience shows will be in perfectly suitable condition for re-use, either by Hope or other people, many years in the future when the existing wells are abandoned and the existing field lines taken up (Ex. 21, 4). On compressor station equipment it did not go quite this far, but very nearly.

The Commission's brief also argues by footnote (p. 94) that "The depreciation rates are not applied to the original cost of the property, but rather against its 'service value'," namely original cost less salvage value. Hence it is a "mathematical impossibility" to arrive at a net book cost less than "salvage value." The writer of this footnote was not familiar with the record, because the Commission's Staff did apply its depreciation rates directly to the "Adjusted Book Cost," computing them "on the average investment for the year" and did not apply them to the "service value" of Hope's properties (Dunn, Ex. 61, R. III, 181; French, R. III, 172-173).

Both the Commission and Cleveland argue that this Court's decision in *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. 575, somehow supports what the Commission did on accrued depreciation in this case (Com. Brief, 96; Cleve. Brief, 48-49). In that case depletion and depreciation of properties in a continuing business such as Hope's were not involved at all, but rather amortization on a sinking fund basis for "a business which can exist for only a limited time"—23 years in all from the beginning to the end of the business (315 U. S., 593, 594). The very question involved here—how much of the total service life of Hope's existing properties has *in fact* expired—was agreed to by the parties for the properties involved in the *Natural Gas Pipeline* case. There the beginning was admittedly 1932, the end admittedly 1954, and the present date an obvious fact (315 U. S., 578, 580, 593).

Concluding, we repeat. Neither in this Court, in the Circuit Court of Appeals, nor before the Commission has anyone claimed that the *results* reached by the Commission's Staff and the Commission *in fact* represents the accrued depreciation and depletion existing in Hope's properties. We also note that although the Commission's Staff worked a year after Hope's accrued depreciation study was presented and had available all of Hope's underlying data before presenting its own depreciation and depletion calculations (Tr. 879; R. II, 44; Tr. 3245), not one single Staff witness, engineer or accountant, either by written exhibit or orally, on either direct or cross examination, ever undertook to state that the results reached by Hope's witnesses did not in fact reflect fully the accrued depreciation and depletion actually existing in Hope's property. The plain truth is that Hope was subjected to the blind application of a depreciation formula, inherently requiring a check of results, whose actual results the Staff never checked and the Commission did not choose to check.

The Circuit Court of Appeals was clearly right in condemning the results in this case as arbitrary (R. IV, 189-193).

**E. SUMMARY AND CONCLUSIONS AS TO RATE BASE.**

As we have seen, the Commission's rate base in this case:

(1) Does not reflect any change in price levels since 1898 and understates by many millions of dollars the present value of Hope's property judged by any reasonable standard (*supra*, pp. 53-54);

(2) Does not include a substantial portion of Hope's properties now actually in service (*supra*, pp. 30-35);

(3) Does not set forth a rate base such as would be determined in California where the prudent investment theory has been practically applied (*supra*, pp. 67-73);

(4) Eliminates a large portion of the other properties by finding that the depreciation therein is substantially in excess of what it is in fact (*supra*, pp. 80-89); and

(5) Applies inconsistent accounting principles to its determinations of rate base and operating statements with the result of understating the rate base and so the cost of gas service (*supra*, pp. 42-46, 86-87).

This Commission rate base which neither represents the property in service nor the cost of this property, nor its present value, is one the like of which has never heretofore appeared in any decision. Probably the nearest approach to it is the District Court's rate base in *West v. The Chesapeake & Potomac Telephone*, *supra*, where it took merely book cost and deducted the book depreciation reserve, a rate base which this Court tersely condemned as arbitrary. 295 U. S., 678-679.

Actually the Commission's method results in a mere bookkeeping rate base. It ignores present property for past bookkeeping. It converts present physical property and property rights of the utility into mere claims to book-

keeping entries which the Commission's accountants and the Commission, in their own judgment, may decide are not "accounting errors" of the past. If generally applied this bookkeeping theory of rate making would produce grossly inconsistent, inequitable and arbitrary results, just as it has in this case.

For example, Company A's books have been kept for the last 40 years on the principle of capitalizing every item that could possibly be capitalized under accounting rules. Its depreciation reserves have been kept down to a minimum. This has enabled it to pay out large dividends on the largest amount of capital stock that could be issued. Company B on the other hand, the Hope Company, has followed a directly opposite principle. It declared no dividends for the first 10 years (Ex. 81, R. III, 13) of its history and plowed earnings back into the property. It has set up large depreciation reserves when its earnings were good, instead of paying dividends, not only to preserve, but to develop its property. Its outstanding capital securities are less than half of its value as assessed for taxation by West Virginia. But on the Commission's theory because of its conservatism and the careful management of its financial affairs in the past Hope is now to have a rate base substantially less than Company A. Sound, conservative and thrifty business practices are to be punished.

Again, let us assume that the Hope properties belong to two separate companies, that Company X owns the one-half of its properties constructed prior to 1917 and Company Y owns the half of its properties constructed since that time. Company X would have an original cost of $25 million, Company Y an original cost of $45 million (*supra*, p. 22). Moreover Company X, being older, would have a higher per cent "depreciation reserve requirement" than Company Y. The result would be that on the Commission's theory Company X would have a rate base of less than half as much as Company Y and its rates would be substantially lower. It is certainly an arbitrary result if

two companies with like properties performing a like service with a like commodity in the same locality have widely different rates. They would have, however, if their rates were fixed by this Commission on its present bookkeeping theory.

In addition the application of this bookkeeping theory rests upon someone's notion as to what was proper accounting in the past and what is proper accounting now. As to this no two accountants have ever agreed—or will. Yet, as illustrated in this case, millions of dollars can be deducted from the rate base because the Commission's present chief accountant believes that well drilling costs are capital expenditures, rightly considered, but also believes it was not an "accounting error" to expense them in the past. Present property rights cannot, except arbitrarily, be allowed to rest on shifting notions of what is proper bookkeeping.

Moreover, this bookkeeping theory necessarily regulates retroactively. Here it has had the effect of determining that nothing is allowed in the rate base for many properties actually existing and in service—and costing and having a present value of many millions of dollars because in the years back to 1898 and long before the Natural Gas Act was even thought of Hope did not capitalize these properties on its books. Hope is thus now penalized millions of dollars because it kept its books in a particular way in the past. Had it kept its books less conservatively—on modern accounting notions—or if it had kept no books at all, it would not be subjected to this enormous penalty. The Natural Gas Act was certainly never intended by Congress to permit the Commission to impose enormous penalties by way of rate base deductions on natural-gas companies because they kept their books one way or another in the past—and to penalize particularly those companies which in the past kept their books most conservatively.

All of this arbitrary action by the Commission has followed in this case from its substitution of its own arbitrary

and untried bookkeeping rate base and rate making theories for the plain requirements of the Natural Gas Act and the Constitution that natural-gas companies must at least be permitted a fair return upon the present fair value of their properties.

## II. OPERATING EXPENSES.

*(Com. Brief, 99-110; Cleve. Brief, 52-55)*

To a very large extent there was no disagreement as to Hope's actual and necessary operating expenses.[32] However, the Staff did, as it phrased it, "disallow" certain items or parts thereof. The Commission in its Opinion did not consider the 1937 and 1938 operating expenses included in the record but did find what it claimed were Hope's necessary operating expenses in 1939 and 1940 and projected future operating expenses on the basis of 1940 alone. In these findings it followed the Staff's "disallowances" and understated or eliminated Hope's operating expenses in substantial sums.

The evidence and the Commission's action on disputed items were as follows:

### A. ANNUAL ALLOWANCE FOR DEPRECIATION AND DEPLETION.

*(Com. Brief, 99-108; Cleve. Brief, 52-54)*

#### 1. Property In Existence In 1940.

Hope's determination of necessary annual depreciation was based on annual rates developed on the basis of a careful study of the entire depreciation experience of Hope from 1898 to date (Ex. 24, R. I, 465-477). Hope's method

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[32] Hope's annual operating expenses for each of the years 1937 through 1940 were set forth as claimed by Hope in Exhibits 37, 126 (R. I, 479) and 130 and as claimed by the Commission's Staff in Exhibits 67 (R. III, 224), 67A (R. III, 258), 78 (R. III, 287) and 90 (R. I, 493 and R. III, 349) and in Commission counsel's briefs before the Commission.

served to correlate completely accrued and annual depreciation. As stated by Mr. Rhodes (R. I, 475):

> "These annual rates of depreciation as heretofore stated are determined from the Company's actual depreciation experience over the entire history of its properties and correlate annual depreciation with the accrued depreciation deducted in the Company's exhibits from reproduction cost new. * * *"

We call attention to this testimony because of the wholly erroneous and unfounded statement in the Commission's Opinion (R. I, 37) that Hope presented inconsistent claims on accrued and annual depreciation.

The Commission's Staff used the annual depreciation rates estimated by Commission engineer French (Ex. 65, R. III, 151). On the important property accounts these estimated annual rates were in fact larger than those determined from Hope's study because of the short service lives erroneously estimated for these properties (*supra*, pp. 26-27). The basic reason for the Commission's inadequate annual depreciation expense is, therefore, not in the annual depreciation rates used by the Commission but in the base to which they are applied.

Hope applied its rates to the present value of *all* of its properties (Ex. 24, R. I, 467), whereas the Commission applied its rates to its "Adjusted Book Cost" (Ex. 61, R. III, 175, 181). Since this adjusted book cost excluded the original cost of $17,000,000 of property owned by Hope and presently in service (*supra*, pp. 20, 33), the Commission allowed $0 for the actual depreciation and depletion occurring in these properties each year. Hope is thus compelled to sell off this property each year for nothing. Such action is arbitrary and obviously confiscatory.

In applying its depreciation and depletion rates to the book cost of the other property rather than to its present value the Commission of course defied the decision of this Court in *United Railways and Electric Company of Baltimore v. West*, 280 U. S. 234, where it said at pages 253-254:

"The allowance for annual depreciation made by the commission was based upon cost. The court of appeals held that this was erroneous and that it should have been based upon present value. The court's view of the matter was plainly right. One of the items of expense to be ascertained and deducted is *the amount necessary to restore property worn out or impaired, so as continuously to maintain it as nearly as practicable at the same level of efficiency for the public service.* The amount set aside periodically for this purpose is the so-called depreciation allowance. *Manifestly, this allowance cannot be limited by the original cost, because, if values have advanced, the allowance is not sufficient to maintain the level of efficiency.* The utility 'is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning.' *Knoxville v. Knoxville Water Co.*, 212 U. S. 1, 13-14. This naturally calls for expenditures equal to the cost of the worn out equipment at the time of replacement; and this, for all practical purposes, means present value."

The Commission and Cleveland urged upon the Circuit Court of Appeals that the decision in *Lindheimer v. Illinois Bell Telephone Company*, 292 U. S. 151, justified the Commission's action and the Commission argues here (Com. Brief, 103-104) that it "modifies the contrary holding in the earlier *West* case, 280 U. S. 234." What this Court actually held in the *Lindheimer* case we have already pointed out, *supra*, pages 82 to 83. We add only that what Mr. Justice Butler said in his concurring opinion in that case (292 U. S. 151, 176) was that the Telephone Company's practice of calculating depreciation charges on the straight line method applied to cost less salvage was not in harmony with the *West* case. The Circuit Court of Appeals obviously analyzed the *Lindheimer* decision correctly (R. IV, 195).

It might be noted that the *Lindheimer* case presents the converse of the present case. There depreciation

charges calculated on book costs produced current annual allowances far larger than necessary to reflect the current consumption of property at present values. This Court accordingly condemned them for rate fixing purposes. Here depreciation charges calculated on partial book costs reflecting low price levels of long ago produce current annual allowances far less than necessary to reflect the current consumption of property at present values. The Circuit Court of Appeals properly condemned them for rate fixing purposes.

It was also urged upon the Circuit Court of Appeals, as again here (Com. Brief, 101-103; Cleve. Brief, 52-53), that the Commission's action in calculating depreciation allowances on partial past costs was justified by the decision in the *Natural Gas Pipeline* case, 315 U. S. 575.

In that case the utility was not satisfied with an ordinary depreciation allowance based on the complete consumption of the property in public service. It claimed instead a larger allowance by way of an amortization charge to replace the property in 23 years. The larger allowance by way of amortization was given to it but was limited to the utility's investment. That the decision is confined to a property of limited life is clearly apparent from the opinion (315 U. S., 593).

In the present case no amortization allowance was claimed by Hope or allowed by the Commission, but only the usual depreciation and depletion allowance. Both Hope's engineers and the Commission's Staff treated Hope as the continuing property it is. In such a continuing property the function of a depreciation allowance is, in the language of this Court in the *West* case, to provide the utility with funds "necessary to restore property worn out or impaired so as continuously to maintain it as nearly as practicable at the same level of efficiency for the public service." Since the great and permanent increase in price levels following World War I, Hope can no longer replace at the cost of its

original construction property worn out in service and retired. On the average its replacement cost will now be at least 50% above its original cost. Unless Hope's earnings are sufficient to enable it to make these replacements at present prices the only alternative is to issue and sell, if it can, capital securities to raise money for that purpose. It must either do this or gradually let its properties disintegrate.

All this was stated more succinctly by Judge Parker (R. IV, 194-196).

Against this sound and common sense view of the court below the Commission's brief argues (pp. 102-103) that Hope and the company involved in the *Natural Gas Pipeline* case are really just alike, and the limited principle applied in that case should also be applied to Hope, because (1) Hope will be forced out of business it if does not extend its pipe lines as contemplated and (2) the *Natural Gas Pipeline* Company may continue in business after 1954 if it obtains more gas. With over 700,000 domestic consumers dependent upon Hope (*supra*, p. 5), Hope must and will continue in business so long as there is natural gas in the Appalachian area or elsewhere within transportation range in the United States. Whatever actually happens to the *Natural Gas Pipeline* Company, the Commission's rate determinations and this Court's ruling were made on the basis that "the business, by hypothesis, will end in 1954."

Next the petitioners argue that constitutional requirements are met because the Commission's annual allowances will "reimburse Hope to the amount" of its "existing investment," that Hope is "therefore made whole and the integrity of its investment maintained," and that it "ceases to have a right to a return upon the portion of the investment which has been consumed, and which is recouped from the rate payers through revenues covering annual depreciation allowances" (Com. Brief, 105-106). Here in one paragraph is the whole erroneous theory.

Hope's true "existing investment" is its existing properties. It owns nothing else. It is these properties that the Constitution protects. It is these existing properties that wear out in service and must be replaced. If Hope is not allowed sufficient money in operating expenses to replace these existing properties as they wear out at whatever the actual current cost of replacement is, "the integrity of its investment" is not, as a matter of fact, maintained, nor is Hope "made whole."

What the writer of the Commission's brief means by "existing investment" is not existing property but what it cost—or rather that part of the cost which the Commission has recognized—when installed. Cost, however, the Constitution does not protect. "The public have not underwritten the investment" (Mr. Chief Justice Hughes in *Los Angeles Gas & Electric Corp. v. Railroad Commission of California*, 289 U. S. 287, 306). Cost, moreover, is not a stable thing. It only appears so because it is expressed in dollars and the symbol for $1 in 1898 or 1940 is the same. The pre-World War I dollars which were spent in building half of Hope's existing property were worth twice as much as the post-World War I dollars which were spent to build the remaining half. Thus when in 1942 Hope receives $1 by way of a depreciation allowance to replace pre-World War I property which then cost $1 to construct, it is as a matter of cold, hard sense getting only ½ of its "existing investment" in that pre-World War I property.

Finally the petitioners argue that to compute depreciation charges on cost is the accepted business and accounting practice (Com. Brief, 106-108). That is so as a matter of practical convenience. Hope did so as a matter of convenience even before its accounting was regulated. But business men are free to adjust their depreciation rates so that their annual depreciation allowances will not understate the actual consumption of their properties measured in terms of the existing, not the past, value of the dollar, just as Hope did.

The fundamental business reality, which business men do and the courts have always recognized is that the dollar has a shifting value with a long run tendency to depreciate. Unless this is recognized in determining the annual depreciation expense for rate making purposes property is consumed in service without compensation. This is confiscation.

**2. Property Added In 1941 and 1942.**

The Commission failed to allow Hope annual depletion and depreciation on the property added after 1940 and in service by July 15, 1942 when its rate order became effective. The Commission estimated this added property at $1,392,021 although Hope claimed it was considerably more (R. IV, 193). The court below was obviously correct in condemning this arbitrary action by the Commission (R. IV, 196).

The Commission's brief by footnote 53 (p. 108) argues that the Commission was not required to make any allowance for *future* capital additions under the *Natural Gas Pipeline* case, and it therefore conferred a "benefit" on Hope, and that Hope "can hardly demand the additional boon of a depreciation allowance on this gratuity." Of course the Commission's allowance was no gratuity. The Commission included in its rate base only one-half of its estimated net increase in Hope's properties for the period 1941 through 1943 thus arriving at the additional property in service when its rate order became effective in the middle of 1942 (Opinion, R. I, 47; R. IV, 193). In the *Natural Gas Pipeline* case the Commission allowed capital additions to the end of 1942 although its rate order was to go into effect in 1940 (315 U. S., 587, 580).

**B. ALLOWANCE FOR RETURN ON HOPE'S WEST VIRGINIA DISTRIBUTION PROPERTIES.**

In allocating costs for the purpose of testing and fixing Hope's interstate rates the Commission allowed Hope a 6½% return on a rate base for its West Virginia distribu-

tion properties which it determined as follows: It took Hope's $3,109,994 book cost of these properties and deducted Hope's $1,393,107 book depreciation reserve therefrom to arrive at a rate base of $1,716,887, to which was added working capital of $150,000 (Ex. 90, R. III, 358).

Thus the Commission used as a rate base for all of Hope's West Virginia distribution properties exactly the rate base used by the District Court in *West v. The Chesapeake & Potomac Telephone Co.*, 295 U. S. 662, 668, 678, and as to which this Court said "This rough and ready approximation of value is as arbitrary as that of the Commission, for it is unsupported by findings based upon the evidence." (295 U. S., 679).

Here the record showed that a considerable portion of these properties was built at the low price levels prevailing before the end of World War I (Antonelli, Tr. 5060-5061). Also the Commission itself demonstrated that Hope's book depreciation reserves did not measure the actual depreciation on any basis. Finally, evidence was submitted that the distribution properties valued by the Commission at $1,716,887 were valued by West Virginia in 1941 for property tax purposes at approximately $2,859,000 (Chisler, Tr. 5433), but the Commission refused to receive this evidence (Tr. 5416).

The Circuit Court of Appeals was clearly correct in condemning this action of the Commission (R. IV, 197-198) and the petitioners do not undertake to support it here.

**C. THE COMMISSION'S EXCLUSION FROM 1940 OPERATING EXPENSES OF $165,963 FOR AN EXPERIMENTAL DEEP-TEST WELL.**

*(Com. Brief, 109-110; Cleve. Brief, 54-55)*

It is claimed (Com. Brief, 108-109) that Hope was not harmed by the Commission's exclusion of Hope's actual 1940 expenditures (not booked until 1941) in drilling a deep-test well which proved dry and which exclusion the Circuit Court of Appeals disapproved (R. IV, 198). Obvi-

ously Hope was directly harmed to the extent of $165,963 in the Commission's retroactive findings as to what rates it should have charged in 1940 which were based on its actual operations as the Commission found them for that year alone. The retroactive rate fixing of the Commission was overlooked by the writer of the Commission's brief at this point.

Actually Appendix B, Table 1, to the Commission's brief shows the exact extent to which Hope has been harmed by this Commission action. It shows Hope's "Exploration and dev. costs" per books for 1940, 1941 and 1942, which compares with the Commission's allowances as follows (Opinion, R. I, 65):

| Year | Exploration and Development Costs | |
|---|---|---|
| | Per Books | Allowed by the Commission |
| 1940 | $ 427,233 | $ 407,920 |
| 1941 | 761,568 | 600,000 |
| 1942 | 552,704 | 600,000 |
| Total | $1,741,505 | $1,607,920 |

Thus Hope would actually be deprived of over $133,000 of its actual exploration and development costs if all of the Commission's orders and findings were allowed to stand.

## D. RETURN FROM GASOLINE AND BUTANE OPERATIONS OF AFFILIATE.

Although the Circuit Court of Appeals held that the action of the Commission in crediting almost all of the affiliated Hope Construction and Refining Company's earnings to Hope was not "so arbitrary and unreasonable as to be invalid" (R. IV, 196), we think it important to point out, as the evidence showed (Rhodes, Ex. 101), that on the rate base calculations used by the Commission for the property of this affiliate all of its gasoline plants existing at December 31, 1938 will be fully depreciated by 1944. At the end of 1938 their book cost was $1,459,000 and the Commission deducted a calculated depreciation reserve to write

them down at that time to $428,000 (Ex. 63, R. III, 389). It claimed they were depreciating at the rate of $70,000 annually (*ibid*). Thus by 1944 they would appear in the Commission's rate base at $0. The complete artificiality of this bookkeeping theory and this result is demonstrated by the photographs of these gasoline plants taken in June, 1941 which appear in Exhibit 113. These photographs were not reproduced in the printed record by reason of the difficulty of reproduction, but they are well worth examining as visual evidence of the departure of the Commission's rate base theories from fact.

## E. FEDERAL INCOME TAX.

In view of its reversal of the Commission's orders the Circuit Court of Appeals found it unnecessary to determine exactly what federal income tax the Commission should have allowed Hope in determining its operating expenses for the various years past and for the future (R. IV, 197). Nevertheless it is apparent that its judgment setting aside the Commission's orders (R. IV, 207) cannot be reversed unless the arbitrary action of the Commission on Hope's federal income taxes meets the approval of this Court.

(1) *Taxes allowed in retroactive findings.* The Commission found Hope's actual federal income taxes in 1939 were $191,521 and in 1940 $912,313 (Opinion, R. I, 61). In the Commission's Opinion it is reported that these actual taxes are "allowed" (R. I, 61) and in its "Findings as to Lawfulness of Past Rates" it is stated in Finding (17) that "the actual operations for 1939 and 1940 are the reasonable and proper bases for determining lawful rates in those years * * *" (R. I, 11). The fact is, however, that in retroactively fixing Hope's rates for 1939 and 1940 the Commission allowed Hope only $39,716 of federal income taxes in 1939 and none whatsoever in 1940 (R. I, 61, 12; R. IV, 41) although it fails to say so.

For 1941 and following years the Commission allowed Hope only $76,579 for federal income taxes although Hope in 1940 had, as we have seen, actually paid $912,313 (Opinion, R. I, 65).

The Commission's Opinion is wholly silent as to any justification for this action. It apparently proceeded on the wholly artificial concept that if Hope's rates had been as low as the Commission now says they should have been for the years 1939 to 1942, Hope would have had no income tax in 1940 and substantially none in 1939, 1941 and 1942. Of course under the rates actually collected by Hope in these years, elsewhere in the Commission's brief (pp. 116-117) admitted to be the legal rates during these years, Hope owed and paid very substantial income taxes. The Commission apparently assumed that Hope should have avoided the $912,313 federal income tax payment for 1940, for example, by changing its rates at the *beginning* of 1940 to the greatly reduced rates the Commission now proposes for 1940 on the basis of the operating results for the full year 1940, although neither Hope nor the Commission itself could possibly have known until well after the *end* of 1940 what those rates should be on any rate making theory (see page 139, *infra*).

The effect of this action by the Commission is disclosed in Appendix B, Table 1, of the Commission's brief. Shown there are Hope's federal income taxes as accrued in these years on the basis of its revenues under its filed rate schedules. These rate schedules were the same until July 15, 1942 after which they reflected the Commission's reduced interstate rates. The actual taxes so shown as compared with what the Commission allowed in fixing Hope's rates retroactively are as follows (R. I, 61, 12, 65):

| Year | Federal Income Taxes | |
|---|---|---|
| | Actual | Allowed by the Commission |
| 1939 | $ 191,521* | $ 39,716 |
| 1940 | 912,313* | 0 |
| 1941 | 1,750,000 | 76,579 |
| 1942 | 2,020,000 | 76,579 |
| Total | $4,873,834 | $192,874 |

*Appendix B, Table 1, shows $225,000 and $1,000,000 for 1939 and 1940 which we have adjusted in accordance with the Commission's adjustments (Opinion, R. I, 60, 61). The 1941 and 1942 accruals may be subject to similar adjustments to reflect final actual payments.

It will be observed that the difference between Hope's actual federal income taxes in these years and the amount the Commission allowed for the purpose of its retroactive rate fixing order is over $4,500,000. Thus Hope has already paid to the federal government over $4,500,000 of the so-called "excess" revenues which the Commission claimed Hope had received in 1939, 1940 and since 1940 and which it labeled "unjust, unreasonable, excessive, and therefore unlawful" (R. I, 12-13).

(2) *Taxes allowed in fixing future rates.* The Commission took the position that under its reduced rates Hope would in the future have to pay only $76,579 of federal income taxes annually at an estimated 40% future federal income tax rate (Opinion, R. I, 64-65). This it termed a "saving" of $1,443,943 a year in the income tax Hope would pay if its former interstate gas rates were continued (Opinion, R. I, 64). As to this we note:

(a) On even the Commission's theories Hope's interstate rates were the lowest possible rates in pre-preparedness and pre-war years.[33] Because of increased prepared-

[33] In 1937 the Commission's rate would have been 32.7¢ and in 1938, 39.1¢, or an average of about 36¢ (from Commission

(*Continued on next page*)

ness and war demands for gas and consequent excessive consumption of Hope's own gas reserves, *which are given no value,* the Commission seeks to reduce Hope's rates to such an extent that the federal government is deprived of all or substantially all income taxes from the largest business Hope has had since World War I. This "tax-saving" is then passed out in the form of a still lower interstate rate for gas—for the benefit of individual consumers not responsible for the increased sales and better able to pay for their consumption of a limited natural resource than ever before.

(b) The Commission arbitrarily assumed that under its reduced interstate rates Hope would still be entitled under the Internal Revenue Code to its existing depletion deductions. The fact is, as shown in Hope's income tax reports which the Commission's Staff examined, that the amount of depletion for income tax purposes allowed Hope by the Internal Revenue Bureau is dependent upon the ultimate sales price of the gas produced (Internal Revenue Code, Secs. 23(m), 114(b)(3); Reg. 103, Sec. 19.23 (m)-1(f); *Consumers Natural Gas Co. v. Commissioner*, 78 F. (2d) 161 (C. C. A. 2d, 1935) cert. denied 296 U. S. 634; *Greensboro Gas Co. v. Commissioner*, 79 F. (2d) 701 (C. C. A. 3d, 1935), cert. denied 296 U. S. 639). With the Commission's reduction in Hope's interstate rates Hope's depletion allowance for tax purposes would decrease proportionately. This means that the Commission should have found, on its own theories, considering the matter to which we here call attention, that Hope under the Commission's own future rates would have to pay a great deal more federal income taxes than the Commission's allowance of

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(*Continued from preceding page*)

Staff's Exs. 67, 67A, 90, R. III, 224, 258, 349; Commission Counsel's Brief before the Commission, Appendix E; Commission Counsel's Reply Brief before the Commission, Appendix A; Opinion, R. I, 51-65). Hope's interstate rates actually averaged 36c for those years (Ex. 90, R. III, 353; Ex. 2, 2; Ex. 2B, 3).

$76,579. Worked out in figures, the result would be a decrease in the Commission's so-called "income tax savings" and a decrease in the amount of total rate reduction calculated by the Commission of about $200,000 each year.[34]

## III. RATE OF RETURN.

The Commission fixed a rate of return of 6½%, based entirely upon current factors affecting this matter (Opinion, R. I, 65-67). The Circuit Court of Appeals sustained this finding under this Court's test in *Bluefield Water Works & Improvement Co. v. Public Service Commission*, 262 U. S. 679, 692 (R. IV, 198-199), although it noted that "in view of the low rate of return allowed"[35] there was

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[34] The Commission's reduced rates reduce Hope's gross revenues by at least $3,600,000. This would reduce its average earnings at the well mouth, after deduction of amounts attributable to transmission, by the same amount. Divided by the 74,000,000 M.c.f. total gas handled (Ex. 2-B, p. 3), this would be a reduction in the computed well mouth value of gas of about 5¢ per M.c.f. The gross income for income tax purposes from the 25,000,000 M.c.f. produced (Ex. 2-B, p. 10) would be reduced $1,250,000. The income tax depletion allowance based on 27½% of the gross income would in turn be reduced about $350,000. This would increase the income tax due at a 40% rate by $140,000. Under the Commission's method of computing its total rate reduction by adding "excess earnings" and "income tax savings," any such increase in Hope's operating expenses results in a decrease in the amount of rate reduction by 140% of such increase. Accordingly the final effect of this depletion adjustment would be a decrease of about $200,000 in the Commission's rate reduction.

[35] That the rate of return in this case is very low was proved not only as a matter of expert opinion (Ex. 19, R. I, 394), but in addition as a matter of fact by a statistical study of the market appraisal of the risks in various groups of utility enterprises made by Mr. Paul B. Coffman, Vice President of Standard & Poors Corporation. He took the aggregate average market prices for the bonds, preferred stocks and common stocks of all utilities of various classes for which the statistics were available and divided this into the annual earnings available for distribution to these securities for the 4-year period 1937 to 1940. His direct testimony is contained in Exhibit 27-A (R. I, 440) and the results of this are set forth in the following table (R. I, 441):

(*Continued on next page*)

a "consequent lack of margin to take care of error in the base" (R. IV, 172).

The test in the *Bluefield* case is that a public utility is "entitled to such rates as will permit it to earn a return *on the value of the property* which it employs for the convenience of the public" equal to certain standards there set forth (262 U. S., 692). This is not a measure of the return on a rate base which does not reflect, and is not designed to reflect, the value of a public utility's property.

The Commission here used a low present rate of return in combination with its original cost rate base. This is clearly inconsistent with the prudent investment method and is unreasonable on any theory.

No one recognized that the prudent investment rate base went hand in hand with a rate of return fixed as of the date of the investment more fully than did Mr. Justice Brandeis. In his classic exposition of the prudent investment theory in *State of Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri, supra*, in which Mr. Justice Holmes concurred, he said (262 U. S. 304-306):

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(*Continued from preceding page*)

**Investors' Appraisal of Capital Risk in Various Divisions of the Utility Business.**

| | 1937 | 1938 | 1939 | 1940 | Four Year Average 1937-1940 |
|---|---|---|---|---|---|
| Electric Utility Operating Companies | 5.47% | 5.50% | 5.41% | 5.43% | 5.45% |
| Water Companies | 5.52 | 5.39 | 5.66 | 5.23 | 5.45 |
| Manufactured and Mixed Gas Company | 6.17 | 6.61 | 6.61 | 6.88 | 6.57 |
| Natural Gas Companies | 7.91 | 7.79 | 7.53 | 7.97 | 7.80 |
| Natural Gas Companies excluding Pacific Lighting Corporation | 8.32 | 8.05 | 8.32 | 9.34 | 8.51 |

It will be observed that the investors appraise the risks of natural gas companies substantially higher than they do the risks of either electric companies or manufactured and mixed gas companies and at a rate substantially higher than the 6½% allowed by the Commission.

"That part of the rule of *Smyth v. Ames* which fixes the rate of return deemed fair, at the percentage customarily paid on similar investments at the time of the rate hearing, also exposes the investor and the public to danger of serious injustice. If the replacement-cost measure of value and the prevailing-rate measure of fairness of return should be applied, a company which raised, in 1920, for additions to plant, $1,000,000 on a 9 per cent. basis, by a stock issue, or by long-term bond issue, may find a decade later, that the value of the plant (disregarding depreciation) is only $600,000, and that the fair return on money then invested in such enterprise is only 6 per cent. Under the test of a compensatory rate, urged in reliance upon *Smyth v. Ames*, a prescribed rate would not be confiscatory, if it appeared that the utility could earn under it $36,000 a year; whereas $90,000 would be required to earn the capital charges. On the other hand, if a plant had been built in times of low costs, at $1,000,000 and the capital had been raised to the extent of $750,000 by an issue at par of 5 per cent. 30-year bonds and to the extent of $250,000 by stock at par, and ten years later the price level was 75 per cent. higher and the interest rates 8 per cent., it would be a fantastic result to hold that a rate was confiscatory, unless it yielded 8 per cent. on the then reproduction cost of $1,750,000. For that would yield an income of $140,000, which would give the bondholders $37,500; and to the holders of the $250,000 stock $102,500, a return of 41 per cent. per annum. Money required to establish in 1920 many necessary plants has cost the utility 10 per cent. on thirty-year bonds. These long-time securities, issued to raise needed capital, will in 1930 and thereafter continue to bear the extra high rates of interest, which it was necessary to offer in 1920 in order to secure the required capital. The prevailing rate for such investments may in 1930 be only 7 per cent.; or indeed 6 per cent.; as it was found to be in 1904, in *Stanislaus County v. San Joaquin & Kings River Canal & Irrigation Co.*, 192 U. S. 201; in 1909, in *Knoxville v. Knoxville Water Co.*, 212 U. S. 1; and in 1912, in *Cedar Rapids Gas Light Co. v. Cedar Rapids*, 223 U. S. 655,

670. A rule which limits the guaranteed rate of return on utility investments to that which may prevail at the time of the rate hearing, may fall far short of the capital charge then resting upon the company.

"In essence, there is no difference between the capital charge and operating expenses, depreciation, and taxes. Each is a part of the current cost of supplying the service; and each should be met from current income. When the capital charges are for interest on the floating debt paid at the current rate, this is readily seen. But it is no less true of a legal obligation to pay interest on long-term bonds, entered into years before the rate hearing and to continue for years thereafter; and it is true also of the economic obligation to pay dividends on stock, preferred or common. The necessary cost, and hence the capital charge, of the money embarked recently in utilities, and of that which may be invested in the near future, may be more, as it may be less, than the prevailing rate of return required to induce capital to enter upon like enterprises at the time of a rate hearing ten years hence. *To fix the return by the rate which happens to prevail at such future day, opens the door to great hardships. Where the financing has been proper, the cost to the utility of the capital, required to construct, equip and operate its plant, should measure the rate of return which the Constitution guarantees opportunity to earn.*

"The adoption of the amount prudently invested as the rate base and the amount of the capital charge as the measure of the rate of return would give definiteness to these two factors involved in rate controversies which are now shifting and treacherous, and which render the proceedings peculiarly burdensome and largely futile. Such measures offer a basis for decision which is certain and stable."

Again he said, page 307:

"In speculative enterprises the capital cost of money is always high; partly because the risks involved must be covered; partly because speculative enterprises appeal only to the relatively small number of investors who are unwilling to accept a low return on their capital."

In a note at the bottom of the same page he further said:

> "Of course, anyone who chances to have money to invest, when money rates are high, gets the advantage incident to investing in a favorable market. If he invests in utility bonds, the higher agreed return upon his capital would be provided for by a rule which measures fair return by capital charges, as suggested above. If he elects to invest in the stock, he would, under the rule suggested, have the opportunity of earning a return commensurate with the value of the capital at the time it was embarked as stock in the enterprise."

Mr. Justice Brandeis, of course, was talking about the cost of the outstanding capital securities of a public utility, having primarily in mind public utilities such as railroads which are largely financed by the sale of securities to the public. Where a corporation has no securities outstanding in the hands of the public, as in the case of Hope, it is not possible to determine from its records the cost of money to it. Mr. Justice Brandeis would be the first to recognize that in such a situation the cost of capital should be estimated precisely the same as he said original cost, where not shown by company records, should be estimated (see *supra*, pp. 36-37). In his opinion above quoted he recognized the obligation to pay interest on long term bonds at the contract rate over long periods of years in spite of a decline in interest rates and said that this was also true "of the economic obligation to pay dividends on stock, preferred or common" (262 U. S., 306).

Writing in 1923, he remembered that "money required to establish in 1920 many necessary plants has cost the utility 10 per cent. on thirty-year bonds." He intended to include that cost for bond money in the rate of return. Undoubtedly he contemplated that if common stock money at that time cost 12% or 15%, that also should be included. In other words he urged the rates of return necessary to

attract capital to the utility at the time it was attracted and invested in the property. He never urged the prudent investment rate base with a current rate of return.

As we have already seen practical application of this method of using a historical cost rate base undepreciated and a historical cost rate of return is made in California, *supra*, pages 68-73. There a higher return is used with the historical cost rate base than would be used by the same Commission on a fair value rate base. For example in the *Los Angeles Gas* case it was 7.7% on historical cost and 7% on fair value.

The Commission here determined a current rate of return to accompany its so-called "original cost" rate base. *It ignored entirely the historical cost of money that Justices Brandeis and Holmes recognized had to be reflected if an original or historical cost rate base were to be used.* Thus the Commission offers to the investor and to the public utility not a continuation of the rate of return they reasonably had a right to expect at the time the utility property was constructed, but whatever rate of return is current at the date on which rates are fixed. This is a departure from the prudent investment theory that robs it of all semblance of reasonableness.

Solely by way of rebuttal, after the Commission's Staff had testified to its rate base theories, Hope introduced testimony as to the rates of return that would have been necessary in various periods of Hope's existence (Brown, R. I, 443-464; Ex. 19, pp. 1-2; R. I, 395-396).

It is perhaps not important to review this testimony in any great detail since the Commission wholly ignored the historical cost of money. Briefly, it showed that in the "early development period" of Hope from 1898 to 1907, when it was a pioneer in a new and highly speculative industry, public financing was impossible and private investors would not have put money into such a property as that of Hope without prospective earnings of 15% to 20%; that in the period 1908 to 1926 when Hope had reached "a

certain stage of maturity and permanency" but when there was little public financing of natural gas companies, capital could not have been attracted to it at any time in the period for less than 12% and "some more than 12% in certain of those years." In fact the average earnings-price ratio of stocks of mining and smelting companies was 13% and of oil producing and refining companies was 14%. In the 1921 period the yield on Aaa bonds was 6% as against less than 3% today and on Baa bonds more than 8% as against 4½% today. In the third period beginning in 1927 when public financing of natural gas securities was practicable and until 1934 the capital requirements of Hope could not have been financed on the basis of less than 10%, and in the final period of lower money rates from 1935 to the present not at less than 8% (Brown, R. I, 446-464).

In Exhibit 136 the amount of plant existing on December 31, 1938 which was constructed in each of these four periods was applied against the minimum rates of return shown for those periods to get a weighted average historical rate of return. This weighted average on the basis of Hope's original cost was found to be 11.83% and on the basis of the Commission Staff's adjusted book cost to be 11.61%.

The Staff presented no study as to past or historical rates of return and the Commission ignored Hope's evidence.

The action of the Commission in taking an adjusted book cost rate base with a modern streamlined current rate of return is clearly arbitrary and unreasonable. It cannot be supported on the prudent investment theory or any other.

## IV. VIEWED IN THEIR ENTIRETY THE RATES FIXED BY THE COMMISSION ARE TOO LOW BY ANY STANDARD.

*(Com. Brief, 21-33; Cleve. Brief, 24-27)*

Early in its brief the Commission claims that the rates prescribed by it, viewed in their entirety, "meet every test of reasonableness and fall far short of confiscation" (p. 25). In this section we shall first show that so viewed those rates are unreasonable on any standard and then consider the over-all matters to which the petitioners call attention.

### A. THE COMMISSION'S PRESCRIBED RATES ARE TOO LOW BY ANY STANDARD.

Little need be said under this heading. All that the Commission allows in its future rates in this case for annual return, depreciation and depletion is (R. I, 12, 53):

| | |
|---|---|
| For Return | $2,191,314 |
| For Depreciation and Depletion | $1,460,037 |
| Total | $3,651,351 |

For past rates it allowed even less (R. I, 12, 61).

This annual allowance for return is about 3.3% on the present value rate base of $66,000,000 claimed by Hope (Ex. 126, R. I, 481) and less than that return on the somewhat higher present value rate base found by the Ohio Commission as of June 30, 1937 (*supra*, pp. 8-9, 30). It is only slightly more than 4% of the over $50,000,000 true value in money of the interstate properties found for tax purposes by the State of West Virginia (*supra*, p. 30).

Moreover, it is equally inadequate if we test it by the prudent investment method of regulating rates as practiced in California where an undepreciated rate base is used and the annual depreciation allowance is based on the sinking fund method.

On the basis of the Commission's own findings as to "original cost" and using the California method of an undepreciated rate base the Commission's rate base for future rates would be as follows (R. I, 3-4):

| | |
|---|---|
| Physical Properties and Operated Leaseholds | $51,957,416 |
| Useful Unoperated Leaseholds | 566,105 |
| Working Capital | 2,125,000 |
| Net Capital Additions | 1,392,021 |
| Total | $56,040,542 |

On this undepreciated rate base the Commission's total allowance of $3,651,351 for annual return, depreciation and depletion is almost exactly 6½%. In other words by the California method and using the Commission's own findings it should have allowed Hope in rates at least as much *for return alone as it has actually allowed for both return and for depreciation and depletion.* Its own unadjusted figures thus show that upon its so-called prudent investment method it has included no allowance whatsoever for annual depreciation and depletion expense.

If in further pursuance of the California method we take an undepreciated rate base reflecting the true original cost of Hope's properties determined in accordance with the Natural Gas Act and consistently with the Commission's determination of operating expenses, that rate base for future rates would be as follows (R. I, 349, 364):

| | |
|---|---|
| Original Cost[38] | $70,593,000 |
| Working Capital | 2,125,000 |
| Net Capital Additions | 1,392,000 |
| Total | $74,110,000 |

On this undepreciated rate base the Commission's total annual allowance of $3,651,351 both for return and for

[38] Hope's original cost of physical properties and leaseholds as of December 31, 1938 plus 1939 and 1940 net additions as found by the Commission (R. I, 36).

depreciation and depletion is not quite 5%. Thus the Commission's total allowance not only includes nothing for depreciation and depletion expense but is 1½% shy of the rate of return the Commission allowed.

But this is not all. Had the Commission given any consideration whatever to a historical rate of return to accompany its "original cost" rate base it would have allowed a rate of return substantially higher than 6½%, in addition to depreciation expense on the sinking fund method of perhaps 1½%.

Thus it is clear that on either a present value or a prudent investment method of regulating rates, and even using the Commission's own findings, the rates fixed by its order are too low.

Moreover, in all the above computations no account is taken of the many respects in which the operating expenses of Hope were reduced and the amount available for return and depreciation consequently inflated. Thus, as heretofore shown, the Commission's allowance for depreciation and depletion expense omits all provision for depreciation and depletion of the well drilling and other costs that were not included in its rate base and for the net capital additions to 1942 that were included in its rate base. Hope's deep test well expenditures in 1940 are not included in expense. Federal income taxes as allowed are wholly inadequate. Net interstate revenues were arbitrarily increased by permitting Hope a wholly inadequate return on its West Virginia distribution plants. Hope's revenues were theoretically increased by appropriating to Hope practically all the earnings from the gasoline and butane operations of its affiliate, allowing substantially nothing for return on that property.

All of these matters and others only serve to accentuate the inadequacy of the rates fixed by the Commission.

**B. THE COMMISSION'S RATES ARE TOO LOW ON THE BASIS OF THE PRICE ALLOWED FOR HOPE'S PRODUCED GAS.**

There is another practical over-all test of the reasonableness of the Commission's order. The order in effect assumes that Hope can continue to sell abnormally large volumes of its own produced gas at prices reflecting costs over the last 45 years and which by any standard are unreasonably low.

The Commission's Staff's computation of Hope's net operating income from its interstate business at former rates was as follows (Ex. 133):

| | |
|---|---|
| 1937 | $3,244,904 |
| 1938 | 1,186,435 |
| 1939 | 3,020,246 |
| 1940 | 5,576,982 |
| 3-year average—1937 to 1939 | 2,483,862 |
| 4-year average—1937 to 1940 | 3,257,142 |

It is obvious at a glance that the Commission could not have ordered a reduction of $3,600,000 in the interstate rates as it did on the basis of the experience of any year prior to 1940 or on either a 3 or a 4-year average. In fact such a reduction was greater than its own computation of Hope's income in any one of those years except 1940.

The Circuit Court of Appeals on this point said (R. IV, 197):

> "*Selection of 1940 as test year.* The Commission selected 1940 without regard to the experience of the years immediately prior thereto, as the test year for determining expense of operation in fixing future rates. It is ordinarily unsafe thus to adopt the experience of a single year as a guide. *United Gas Public Service Co. v. Texas*, 303 U. S. 123, 145; *West Ohio Gas Co. v. Public Utilities Comm'n*, 294 U. S. 79, 81. We do not think that under the peculiar circumstances of the case, however, this action of the Commission can be condemned as arbitrary or unreasonable. The increased demand for gas resulting from war conditions,

made the experience of 1940 a safer guide for the future than that of prior years. Hope makes much of the fact that the winter of that year was more than ordinarily severe and that the increased demand for gas resulted in a large percentage of sales representing gas from its own wells, which did not involve payment of the charge required by its contracts on gas purchased from others. The increased demand due to war conditions, however, must necessarily have the same effect, so far as this matter is concerned. The experience of 1940 was the only experience properly comparable. In further proceedings, the experience following 1940 can be added to the experience of that year to form a longer and more dependable test period."

Our point on this is not concerned with total demands or sales. Obviously during the war period the industrial demand will be sufficient to maintain the 1940 and even higher volumes so long as they can be supplied. But the increased volumes above a normal amount to a considerable extent have had to be taken from Hope's own depleted reserves and the incremental cost allowed for this additional volume in the Commission's rates is so low by any standard as to discredit the Commission's whole rate-fixing formula and its results. This is a matter of crucial practical importance that requires some explanation.

The gas business in the Appalachian area is wholly unlike that in either the southwest or California. There are no longer any large wells. Hope's supply comes from 16,000 small wells widely scattered over the state, many of them producing oil as well as gas. Of these it owns 3,300 wells and purchases the production of the remaining 12,600 (*supra*, p. 5).

Its method of operation for many years has been to rely on purchased gas to meet the minimum demands of its daily market and to produce its own gas to supply the difference between the minimum and the extremely fluctuating maximum daily demands (Tonkin, Ex. 4, R. I, 132-142). This method enables Hope to buy purchased gas on a

steady load basis at a lower price than it would otherwise be required to pay (*ibid.*, 142). Thus in July, 1939, for example, on several days it produced substantially nothing from its own wells; in January, 1940 it produced large quantities in varying daily amounts ranging up to 175,000 M.c.f. per day (Ex. 2, Chart, 16).

Hope therefore uses its own wells as a balance on its system precisely as an artificial gas company would use a storage gas holder. So important is the maintenance of Hope's own reserves that in recent years it has during off-peak periods stored gas in some of its depleted fields nearest its markets with gas from more distant sources (Tonkin, Tr. 5813-5815).

When increased industrial activity arising from the preparedness program began to manifest itself in late 1939 and the daily demands upon it increased Hope could not provide itself with additional supplies from the Appalachian field because they are not available (Tonkin, R. I. 504). Accordingly in 1940 it was compelled to withdraw from its own reserves designed to maintain a balance on its system more than 10 billion cubic feet above the amount it had withdrawn in 1939 or does withdraw in any normal year.

The effect of these extraordinary withdrawals in 1940 upon costs when costs are computed as the Commission did in this case is most startling. Cleveland computed this cost in its reply brief before the Commission in a table which we reproduce as Appendix D, page 183, *infra*. The table is based entirely on figures taken from the Staff's exhibits. It shows that Hope withdrew from its own gas reserves in 1939 16.5 billion cubic feet and in 1940 26.8 billion cubic feet (as estimated by the Staff), an increase of 10.3 billion feet. It then shows in detail the direct costs of this gas for the two years 1939 and 1940 to be respectively 11.88¢ and 8.73¢ per M.c.f.

In addition Cleveland worked out the incremental cost to Hope of producing 10.3 billion cubic feet in 1940 over

and above the normal 16.5 cubic billion feet it produced in 1939. This it found to be, using the Staff's methods which were followed by the Commission, 3.64¢ per M.c.f. (Appendix D, page 183 *infra*).

Thus the Commission's order in this case is based on the assumption that Hope can continue for the indefinite future to produce from its own declining gas reserves 10 billion cubic feet more than average withdrawals of peace time and supply it at the well mouth or can purchase similar quantities, at a direct cost of less than 4¢ per M.c.f. And this in face of the admitted fact that Hope cannot replace this gas at any figure approaching this cost. Even its steady load purchased gas has been costing it an average of 18¢ per M.c.f. (Ex. 78, R. III, 309).

The Commission made findings that should have warned it that a rate order based solely on this war time experience was arbitrary. It found the following facts, the last column only being added as a matter of computation (R. I, 12):

| | 1939 | 1940 | Increase 1940 over 1939 |
|---|---|---|---|
| Revenues from Interstate Sales | $14,866,894 | $19,296,755 | $4,429,861 |
| Operating Deductions | 11,845,649 | 12,997,845 | 1,152,196 |
| Net Operating Income from Interstate Sales | $ 3,021,245 | $ 6,298,910 | $3,277,665 |

In addition the Commission found the total interstate sales in 1939 to be 41,350,569 M.c.f. and in 1940 to be 53,604,243 M.c.f., an increase of 12,253,674 M.c.f. (R. I, 51).

Thus it found that an increase in sales of 12.2 billion cubic feet was achieved by an increase in operating expenses, which it refers to as "Operating Deductions," of only $1,150,000, or at a cost to Hope of only 9¢ per M.c.f. That is, at a time when the average market cost to Hope of purchased gas in the West Virginia fields was 18¢ per M.c.f., the Commission in effect found that Hope could supply at delivery points 12 billion cubic feet from its own reserves or otherwise at a cost of only 9¢ per M.c.f.

Thus the Commission's order in this case is based on the assumption that Hope can continue for the indefinite future to supply 12 billion cubic feet at delivery points at a cost of 9¢ per M.c.f. These low costs are achieved of course in part by the omission of the drilling costs of the wells and by other rate base and operating expense findings by the Commission to which reference has been made. In part it is due also to the low initial cost of gas discovered over the years for the present value of which no allowance is made.

The Commission's order fails to recognize that the Hope system cannot function without a well maintained gas reserve to meet peak demands. The order requires Hope to sell what is an essential part of its plant at a fraction of its replacement cost and at a fraction of its value either in the market or to Hope. No matter what theories may be advanced to justify such a result the result condemns itself. It is the arbitrary application to an extractive industry with special problems of a strait-jacket rate making theory which the Commission itself points out it developed in connection with its regulation of electric companies (Com. Brief, 68).

## C. THE COMMISSION'S CLAIMS AS TO THE OVER-ALL REASONABLENESS OF ITS ORDER.

*(Com. Brief, 25-33)*

The Commission brief's first claim is that Hope's financial history justifies its order. Unless it is proper for the Commission now retroactively to regulate Hope's rates over the last 45 years Hope's financial history clearly shows that its recent rates have been entirely reasonable. Previously in this brief, *supra*, pages 11 to 13, we have set forth Hope's financial history since 1926—the first year of full operation of its present extended property. This shows that while its earnings from year to year have been most irregular, fluctuating as they do with both weather and industrial conditions, nevertheless on the average Hope has

earned for return, depreciation and depletion $4,150,000 or 7.7% of the average book cost of its fixed assets. From this record we know that those fixed assets are understated to the extent of $17,000,000.

Certainly there is nothing in that financial history that would justify the rates fixed by this Commission which are lower than the rates prevailing at any time during that 15-year period.

The Commission's next claim is that Hope's actual experience under the prescribed rates is such that it would have been justified in making a $1,091,790 larger reduction in rates than it made (Com. Brief, 28). This it seeks to prove by bringing into this record for the first time the annual reports Hope made to the Commission and calculations made therefrom and printed as its Appendix B. That at this date the record cannot properly be supplemented in this way has been decided by this Court (*West Ohio Gas Co. v. Public Utilities Commission of Ohio (No. 1)*, 294 U. S. 63). Aside from this, it should be pointed out that the Commission's order did not become effective until July 15, 1942 and that in consequence none of these annual reports can be used as experience under the new rates without substantial adjustments which the Commission's brief assumes to make.

However, if we take the Commission brief's own calculations in its Appendix B and make two simple adjustments, both of which are necessary in the interests of accuracy, the result is to show that on the Commission's own basis and theories the rate reduction ordered proved excessive by $600,000 in the year 1942.

Those two adjustments are:

1. The Commission brief's calculation (p. 141) starts with the revenues Hope would have received in 1942 if its former rates had remained in effect and with the Commission's findings of expenses for the year 1939, to which it adds the book increase in expenses between 1939 and 1942

to determine what the Commission would have found for 1942. But the Commission itself in fixing Hope's rates based its determinations exclusively upon the year 1940 without reference to prior years. (Opinion, R. I, 70). Accordingly the brief's calculation should likewise have been based upon the findings for 1940.

In Appendix E, page 185 below, we have set up the calculation exactly as the Commission brief shows it at page 141 except that 1940 is the starting point rather than 1939. All calculations are made by exactly the same method used by the Commission's brief.

2. In the second place, as the Commission brief recognizes in the footnote on page 141 but does not mention in its discussion, the net operating revenues computed in its Appendix B included the results of operation of the former Reserve Gas Company properties, merged into Hope on December 30, 1939, which by stipulation were excluded from consideration in this case (*supra*, page 19). A ready means of eliminating the revenues and expenses of these properties is furnished by the stipulation (Ex. 77) which sets forth the amounts of revenues, expenses and earnings to be excluded from 1940 data as attributable to these Reserve properties. It is a conservative assumption that the revenues and expenses of these properties would have been at least as much in 1942 as the stipulated 1940 amounts. Accordingly in Appendix E we have eliminated the Reserve property revenues and expenses in the exact amounts stipulated and in the exact manner that the parties did in eliminating them for 1940.

The net result of these two simple and necessary adjustments of the Commission brief's calculations as shown in column (5) of Appendix E is that the rate reduction which the Commission would have computed if it had based its rates upon 1942 operations rather than upon 1940 would have been $4,159,253 instead of the $4,757,452 (Com. Brief, 28) reduction in 1942 revenues actually resulting from its rate order. Thus instead of "earning $1,091,790 annually

in excess of a 6½% rate of return, if the 1942 level is taken as the criterion," as the Commission's brief claims (p. 28), *Hope is actually earning $600,000 less than the Commission would have allowed if it had used 1942 operations.*

So long as the experience of other years has been referred to it may also be observed that had the rates fixed by the Commission's order been in effect for the years 1937 to 1939 Hope's net operating income from interstate sales, using the Commission's determinations, would have been as follows (from Staff's Exs. 67, 67-A, 90, R. III, 224, 258, 349; Commission Counsel's Brief before the Commission, Appendix E; Commission Counsel's Reply Brief before the Commission, Appendix A; Opinion, R. I, 51-65):

| | | |
|---|---|---|
| 1937 | $ 708,653 | |
| 1938 | (1,394,164) | loss |
| 1939 | 333,502 | |
| 3-year average | ($117,336) | loss |

These three years include the year the complaint was filed, 1938, and one year's experience on each side. It is beyond controversy that the new rates would not have met any test of reasonableness in any one of these three years or even on the four year average including 1940.

It is next claimed that the rate base sought by Hope does not square with its operating experience since if Hope's claims as to rate base and operating expenses were allowed in full it would have only made a return of 3.27% for the 4-year period 1937-1940. This percentage is misstated, as shown in the footnote[37] below, but aside from this

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[37] The 3.27% is the amount Hope claimed it would earn in the future on the basis of average 1937-1940 revenue and expense experience, but adding to expenses the substantially increased Federal income taxes, wage payments and other increased future expenses not reflected during 1937-1940. Its actual experience during these years, based on a $66,000,000 present value rate base, Hope claimed was as follows (Ex. 126, R. I, 481):

(*Continued on next page*)

the issue here is not whether the rate base and operating expenses as claimed by Hope are 100% acceptable. The Commission did not base its order on these claims.

The history of rate proceedings as set forth in the Statement, *supra*, pages 6 to 9, indicates a very clear reason why Hope did not attempt to secure a higher rate in the years immediately preceding 1940. The rates of East Ohio, its principal customer, and also the rates of Peoples, its second largest customer, were involved in litigation in those respective states (*supra*, p. 8; *Peoples Natural Gas Co. v. Pennsylvania Public Utility Commission*, 14 A. (2d) 133 (Pa., 1940)). In view of the affiliation between Hope and these companies it was not possible actually to make effective a higher rate even though the return being earned by Hope was not adequate.

Finally it is claimed with apparent seriousness (Com. Brief, 30-33) that doubtful items of substantial amount were resolved by the Commission in Hope's favor. As we understand what is urged here, the Commission could reasonably and not arbitrarily have done the following:

(1) Reduced the $33,712,000 rate base it allowed for the future by $26,000,000—to $7,712,000;

(2) Decreased its allowances for Hope's annual operating expenses by over $600,000;

(3) Allowed instead of its 6½% rate of return only 5½% or preferably 5%.

We apply these suggestions. A 5% rate of return on a $7,712,000 rate base amounts to less than $386,000. $560,000 of the operating expenses which it is suggested

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(*Continued from preceding page*)

| | |
|---|---|
| 1937 | 3.98% |
| 1938 | 1.18% |
| 1939 | 3.36% |
| 1940 | 6.98% |

Even on its theories the Commission's Staff determined that in 1938 Hope was earning only 4.38% on a net book cost rate base of $31,465,000 (Ex. 90, R. III, 352).

the Commission might properly have eliminated consist of actual out-of-pocket payments for operating wages, property taxes and exploration costs (Opinion, R. I, 62) and for current administrative costs on current property construction (Opinion, R. I, 49-50). If these actual out-of-pocket expenditures of $560,000 are not allowed in operating expenses they must be paid out of the $386,000 return now suggested as reasonable. That is, of course, insufficient by $174,000.

Thus the "acoustics of such liberality" referred to in the Commission's brief (p. 33) are created from the argument that the Commission should reasonably have compelled Hope to operate at a $174,000 annual loss.

## D. CLEVELAND'S CLAIM THAT NO CONSTITUTIONAL QUESTION IS PRESENTED.

Cleveland's brief does not urge that the over-all results reached by the Commission are reasonable, except to state that "Nothing arbitrary was done by the Commission" (p. 56) and to reiterate that all of the Commission's findings "had a rational basis and are supported by substantial evidence" (pp. 38, 39, 46, 52 and 55). Instead, Cleveland argues that Hope is not injured because its parent corporation also owns the stock of East Ohio and Peoples, Hope's largest customers although its petition for certiorari raises no such question.

This argument proceeds upon the premise that Hope, as a corporation, is not a "person" within the meaning of the Fifth Amendment and hence is not in itself entitled to constitutional protection. That this premise is erroneous we need not say. *Covington and Lexington Turnpike Road Company v. Sandford*, 164 U. S. 578, 592; *Kentucky Finance Corporation v. Paramount Auto Exchange Corporation*, 262 U. S. 544, 550; *Grosjean v. American Press Co.*, 297 U. S. 233, 244. Cleveland's argument likewise assumes that the Ohio and Pennsylvania rate regulatory authorities will fail to reflect the Commission's rate reduc-

ing order, if it should be held valid, or will permit East Ohio and Peoples sufficient additional allowances to offset the confiscation of Hope's properties. The history of the effective rate litigation in these states to which we have called attention, *supra*, pages 6 to 9, denies this premise. In fact, the result of this regulation has been to prevent Hope from receiving fully compensatory rates in the pre-war years, a fact now attempted to be used by the petitioners to deny the force of Hope's evidence.

Irrespective of all this, the Natural Gas Act requires that rates be "just and reasonable" without regard to any question of affiliation and the validity of the Commission's orders under the Act is here in question. As the Commission's brief points out (p. 15), "In judicial review under the Natural Gas Act, the statutory and constitutional standards coalesce." Hence, the question is presented whether the Commission's rates are "too low" under constitutional standards, even assuming every argument made by Cleveland were correct.

## V. THE COMMISSION'S FINDINGS AS TO LAWFULNESS OF PAST RATES.

*(Com. Brief, 110-123; Cleve. Brief, 60-77)*

In 1939 Cleveland amended its original complaint against Hope and requested the Commission to determine that to the extent that Hope had charged East Ohio more than 30¢ per M.c.f., Hope had violated the Natural Gas Act ever since June 21, 1938, the effective date of the Natural Gas Act (R. II, 15). The Pennsylvania Public Utility Commission's complaint filed in 1939 included a request that the Commission determine that Hope had violated the Natural Gas Act since June 21, 1938 by reason of its charges to Peoples, Fayette and Manufacturers (R. II, 20, 22, 24). Neither Cleveland nor the Pennsylvania Commission introduced any evidence in support of these or other charges.

As a part of its final determinations the Commission made its "Findings as to the Lawfulness of Past Rates" (R. I, 8) and argued its right to make these findings in its Opinion (R. I, 67-69). These findings, where specific, are directed to Hope's past rates to East Ohio only. They ignore the request of the Pennsylvania Commission.

It is to be noted that these are not findings that Hope's existing interstate rates are unreasonable, which finding is required before the Commission can fix future rates and was made in its "Order Reducing Rates" (R. I, 1), but are separate findings that Hope's interstate rates to East Ohio on file *in the past* were unreasonable and "unlawful" and, further, are separate findings as to precisely what the "lawful" past interstate rates should have been.

The Commission's lack of statutory authority to make these retroactive rate determinations, their otherwise unreasonable and arbitrary character, and their reviewability have been analyzed and stated so clearly by Judge Parker (R. IV, 199-203) that discussion here is not really required. Furthermore, in *Public Utilities Commission of Ohio v. United Fuel Gas Co.*, 317 U. S. 456, this Court analyzed the rate provisions of the Ohio public utility law applicable in that proceeding which are substantially identical with the rate provisions of the Natural Gas Act. It said (317 U. S., 464):

> "If, after such hearing, the Commission finds that the rate or charge is unjust, unreasonable, or otherwise unlawful, it must 'fix and determine the just and reasonable rate, fare, charge, toll, rental or service *to be thereafter* rendered, charged, demanded, exacted or collected for the performance or rendition of the service, and order the same substituted therefor.' § 614-23 (italics added). The statute in terms thus gives the Commission power to prescribe such rates prospectively only. If, after notice and hearing, the Commission finds rates to be unlawful, it can then fix the just and reasonable rates 'to be thereafter' charged. The establishment of new rates must be

preceded by a finding that the old rates are unjust and unreasonable, and the new rates are prospective as of the date they are fixed. *There is no basis in the statute for concluding that the Commission's orders can be retroactive to the date when the Commission's inquiry into the rates was begun; on the contrary, the explicit language of the statute precludes such a construction.*"

Nevertheless, in view of the extended arguments of the petitioners, we point out:

**A. THE COMMISSION HAS NO AUTHORITY UNDER THE NATURAL GAS ACT TO MAKE THESE RETROACTIVE DETERMINATIONS.**

1. Section 5(a) of the Natural Gas Act (15 U. S. C. 717d(a)) makes it crystal clear that the Commission's rate making authority is prospective only. As there stated, it may, after a hearing—

> "determine the just and reasonable rate, charge, classification, rule, regulation, practice or contract *to be thereafter observed and in force*, and shall fix the same by order:"

The Commission admitted the statute in its Opinion, stating (R. I, 68):

> "The Commission does not have the authority to fix rates for the past and to award reparations."

Despite this the Commission has in fact attempted "to fix rates for the past." It has determined that Hope's interstate rates were unlawful in designated amounts in 1939, 1940 and since (Finding (21), R. I, 12) and specifically as to Hope's rates to East Ohio it finds that they should have been 34¢ per M.c.f. in 1939 and 28.5¢ in 1940.[38] We note that during these years, and previously, Hope's actual filed rate to East Ohio was about 36.5¢ and that had the

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[38] Total allowed "compensation" shown in Finding (23) (R. I, 12) divided by quantities sold shown at page 40 of the Opinion (R. I, 51).

Commission applied its theories to 1937 and 1938 the East Ohio rates for those years on its own Staff's figures would have been 33¢ for 1937 and 39.5¢ for 1938,[39] or an average of almost 36.5¢.

What is intended to be done with these rates so fixed for the past is perfectly plain from the Commission's Opinion. They are to be reported to The Public Utilities Commission of Ohio in connection with its pending hearings as to the validity of certain 1939 and 1940 Cleveland rate ordinances specifying rates for East Ohio[40] (Opinion, R. I, 69) and the Ohio Commission is supposed to accept them as conclusive determinations of the rates East Ohio should have paid Hope in the past under the following pronouncement of the Commission in this case (Opinion, R. I, 69):

> "Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness of the interstate wholesale rates charged by Hope and other natural gas companies."[41]

Obviously the intended effect of the Commission's "Findings As to Lawfulness of Past Rates" in this case is "to

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[39] As shown *supra*, pages 104-105, the average rate for all of Hope's interstate sales which the Commission would have found on its own theories was 32.7¢ for 1937 and 39.1¢ for 1938. The Commission would have used the next even half cent, or 33¢ for 1937 and 39.5¢ for 1938, as the East Ohio rate. This is the way in which it derived its 34¢ East Ohio rate for 1939 and its 28.5¢ rate for 1940.

[40] As we pointed out in the Statement, *supra*, page 9, these ordinances are attempts by Cleveland to enforce beyond June 30, 1939 a rate which was held grossly confiscatory by the Ohio Commission in 1939 and by the Supreme Court of Ohio in 1940 (*Cleveland* case, *supra*, pp. 8-9). Cleveland's various claims (pp. 2, 63) that its consumers will be entitled to a $20 and a $13 per consumer refund if its views are sustained by this Court is merely a claim and nothing more.

[41] But see Section 22 of the Natural Gas Act, *infra*, pp. 133-134.

fix rates for the past" and through action of the Ohio Commission, which is to recognize the Power Commission's "exclusive jurisdiction" since 1938, "to award reparations," both of which the Commission frankly admits it has no authority to do. That Cleveland so construes its effect it states (Cleve. Brief, 63).

On this point the court below properly said (R. IV, 200):

> "* * * As the Commission itself says, it was not given authority to fix rates for the past or to award reparations on account of past rates. If it was not given the power to fix past rates, or award reparations based upon their unreasonableness, it certainly was given no power to do the same thing indirectly by making findings of fact as to past rates to be given effect in rate proceedings before state commissions. No intention on the part of Congress to vest any such unusual power in a commission ought to be indulged unless conferred in the plainest terms; and not only is it not plainly given here, but such power cannot be spelled out of the statutes on any theory of interpretation with which we are familiar."

2. That any such power would have to be found directly in the Act, and not by speculative implications from the general powers of the Commission under Sections 4(a), 5(a), 5(b), 14(a) and 17, which are the sections of the Act referred to by the Commission in its Opinion, is plain because Congress is well aware of the two separate kinds of rate making power—prospective and retroactive—and of the limitations that must be placed, as a practical matter, upon retroactive rate making powers if any such powers are granted. Congress's experience with these separate functions in connection with the Interstate Commerce Commission has been complete.

Originally the Interstate Commerce Commission was given no other power as to rates than the *quasi*-judicial power of investigating past rates on complaint of a shipper

and if it found them unreasonable to award reparation. The Hepburn Act of 1906 added to this *quasi*-judicial power the *quasi*-legislative power of fixing rates for the future if it found existing rates unreasonable (34 Stat. 589, 49 U. S. C. Sec. 15). But these two powers have always been regarded as separate and distinct. In *Baer Brothers Mercantile Company v. Denver & Rio Grande Railroad Company*, 233 U. S. 479, Mr. Justice Lamar said (p. 486):

> "But awarding reparation for the past and fixing rates for the future involve the determination of matters essentially different. One is in its nature private and the other public. One is made by the Commission in its quasi-judicial capacity to measure past injuries sustained by a private shipper; the other, in its quasi-legislative capacity, to prevent future injury to the public."

See also *Arizona Grocery Co. v. Atchison, Topeka & Santa Fe Railway Co.*, 284 U. S. 370; *Interstate Commerce Commission v. Cincinnati, New Orleans and Texas Pacific Railway Company*, 167 U. S. 479.

Had Congress intended to vest *quasi*-judicial power in the Commission to determine the reasonableness and lawfulness of past rates and declare them for use by State commissions or others, it would have done so in express language as it has done in the case of the Interstate Commerce Commission. If the analogy of the Commerce Act were followed, such a finding would be provided for only upon complaint by the customer directly affected, made *within some short fixed period of limitations*. Such a statute would either have made that finding *prima facie* evidence in a court in which it was to be enforced or have authorized the Commission itself to make an order respecting it. Its effect would not have been left an uncertain matter for future debate. Here the Commission's brief seems most doubtful as to their effect (pp. 113-114) and certainly not in agreement with the Commission and Cleveland.

3. The rate regulatory scheme of the Natural Gas Act set forth in Sections 4 and 5 is entirely clear and complete. Rates must be filed with the Commission and until they are changed for the future by or with the approval of the Commission they "prevail." This is precisely what the Solicitor for the Commission said in explaining the Natural Gas Act to the Congressional Committee before its adoption.[42]

Under such provisions as Sections 4 and 5 of the Natural Gas Act it is perfectly well settled that the rate which is filed with the Commission is the only rate the utility can accept or its customers can lawfully pay, regardless of any claim that it is unreasonable, until changed prospectively by the Commission. *Texas and Pacific Railway Company v. Abilene Cotton Oil Company*, 204 U. S. 426; *Louisville & Nashville Railroad Company v. Maxwell*, 237 U. S. 94; *Dayton Coal and Iron Company v. Cincinnati, New Orleans and Texas Pacific Railway Company*, 239 U. S. 446 and other cases.

Congress obviously recognized that to confer upon the Commission jurisdiction to say that wholesale rates legally received and paid in the past in accordance with filed schedules were nevertheless unlawful and in violation of the Natural Gas Act would leave both the selling and purchasing gas companies in the greatest confusion. It is significant that the first draft of the Public Utility Act of 1935, which was the model for the subsequently enacted Natural Gas Act, contained a provision (Sec. 213) authorizing the issuance of reparation orders. This section was eliminated from the Bill by the Senate Committee on Interstate Commerce, together with another section. As to these sections the Committee said:

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[42] *Hearing before a Subcommittee of the Committee on Interstate and Foreign Commerce, House of Representatives, Seventy-Fourth Congress, Second Session, on H. R. 11662*, pages 28-29 (U. S. Government Printing Office, Washington, 1936).

"They are appropriate sections for a State utility law but the committee does not consider them applicable to one governing merely wholesale transactions." (*Report of the Senate Committee on Interstate Commerce on the Public Utility Act of 1935*, 74th Congress, 1st Session, Senate Report No. 621, page 20, see Appendix H hereto, page 150.)

Reviewing these considerations the court below properly observed (R. IV, 202):

"When rates were filed with the Commission pursuant to section 4(c) of the Act they became the only lawful rates which the utility could charge or accept. Cf. *L. & N. R. Co. v. Maxwell*, 237 U. S. 94. Until changed by the Commission under the power granted pursuant to section 5(a) they were binding alike upon the company and its customers; and, in the absence of a provision for award of reparation, there could be no occasion for a determination of their reasonableness except as reason for changing them in an order prescribing rates for the future."

4. Finally, we note that the Natural Gas Act itself states that the Commission shall have no jurisdiction to find anything "unlawful" and hence a violation of the Act, except as basis for exercising its prospective rate fixing power (Section 5(a), 15 U. S. C. 717d (a)). If the Commission wants to secure a determination as to the claimed unlawfulness of Hope's past rates to help the City of Cleveland or others it must proceed in the District Court where Hope will have its day in court. Section 22 of the Act provides:

"Sec. 22. The District Courts of the United States, the District Court of the United States for the District of Columbia, and the United States courts of any Territory or other place subject to the jurisdiction of the United States *shall have exclusive jurisdiction of violations of this Act* or the rules, regulations, and orders thereunder, and of all suits in equity and actions at law, brought to enforce any liability or duty created by, or to enjoin any violation of, this Act or any rule,

> regulation, or order thereunder. Any criminal proceeding shall be brought in the district wherein any act or transaction constituting the violation occurred. Any suit or action to enforce any liability or duty created by, or to enjoin any violation of, this Act or any rule, regulation, or order thereunder may be brought in any such district or in the district wherein the defendant is an inhabitant, and process in such cases may be served wherever the defendant may be found. Judgments and decrees so rendered shall be subject to review as provided in sections 128 and 240 of the Judicial Code, as amended (U. S. C., title 28, secs. 225 and 347). No costs shall be assessed against the Commission in any judicial proceeding by or against the Commission under this Act."

Language could hardly be clearer. "Exclusive jurisdiction of violations of this Act" is vested in the District Courts and ergo is not vested in the Commission. If Hope has violated the Act by its former rate schedules as is claimed, jurisdiction to determine that matter is in the District Courts.

5. That *quasi*-legislative regulatory acts such as the Natural Gas Act do not confer the power to make any retroactive findings as to reasonableness of filed rates unless expressly so provided, is so clear that litigation has rarely been necessary. The theory adopted by the Commission in this case was once tried and promptly disposed of in *Great Western Portland Cement Co. v. Public Service Commission of Kansas*, 121 Kans. 531, 247 Pac. 881 (1926) where the court said (247 Pac. 883):

> "The language of the present statute does not appear to us to give authority, expressly or by fair or even liberal interpretation, for the commission to make findings as to the reasonableness of a rate previously charged or as to what rate would at that time have been reasonable."

More specifically, the very construction of the Natural Gas Act adopted by the Commission in its Opinion had

already been denied by the Supreme Court of Ohio in the *Cleveland* case, *supra*, page 9. During the course of the hearings before the Ohio Commission as to the reasonableness of the Hope-East Ohio rate, Cleveland requested the Ohio Commission to stay its decision until the Federal Power Commission had retroactively adjudicated the "lawfulness" of the Hope-East Ohio rate. The Ohio Commission denied this stay and the Ohio Supreme Court affirmed this action as proper, saying (137 O. S., 253-254, 28 N. E. (2d), 613):

> "Any river rate the Federal Power Commission might designate would be of an entirely prospective nature and would consequently be of no benefit or controlling force in the present proceedings."

No other interpretation of the clear provisions of the Natural Gas Act is possible and the Circuit Court of Appeals properly so held.

The arguments made by the petitioners here that jurisdiction in the Commission to adjudge and in effect fix rates in the past is to be "implied" from various general provisions of the Natural Gas Act (Com. Brief, 114; Cleve. Brief, 63-65, 67-69) were most carefully considered by the court below which said (R. IV, 201):

> "In none of these sections is any power granted to make findings as to reasonableness of past rates 'as an aid to state regulation'; and in all of them taken together and construed in the light most favorable to the existence of the power, there is no indication of any intention on the part of Congress to grant such power. We cannot escape the conclusion that, if it had been the intent of Congress to grant unusual power of this sort, it would have said so plainly."

It likewise carefully considered the argument here again advanced (Com. Brief, 117; Cleve. Brief, 69-76) that rate payers "may be left without a forum to challenge the lawfulness of interstate wholesale gas rates prevailing be-

tween the date of the Act's passage and the effective date of a Commission rate-fixing order." The rate payers' forum is of course the Federal Power Commission and, as the court pointed out, that forum can act forthwith "in view of the provision of the statute for the entry of interim orders" (R. IV, 202).

Had that forum in this case acted forthwith upon the filing of Cleveland's complaint in 1938 it would have found, as the record in this case shows, that Hope's filed rate was not only reasonable but too low. It should have been even on the Commission's present rate-making theories over 39¢; it actualy was 36¢ (*supra*, p. 104). There is, therefore, no question involved here of Hope filing an unreasonable rate and keeping it in effect "while defying the Federal Power Commission with its limited staff to determine and fix just and reasonable rates to be effective only after many years" (Cleve. Brief, 69). We also note that the rate Hope filed was found reasonable by the Ohio Commission in 1939 and by the Ohio Supreme Court in 1940 (*Cleveland* case, *supra*, pp. 8-9).

It is likewise significant that Clevelaud's motion for an interim order reducing Hope's rates to East Ohio in the sum of $662,000 a year filed in September, 1940, was denied by the Commission, after full consideration, on December 20, 1940, although without prejudice to its final determination (R. II, 43-44). All of Hope's evidence in chief was then in. Had the Commission granted Cleveland's motion no one would ever have claimed the Commission had authority to fix retroactively the very much larger reductions for 1940, 1941 and 1942 it has now made. *Arizona Grocery Company v. Atchison, Topeka & Santa Fe Railway Co., supra*, page 131. Certainly the Commission on any reasonable standard of administrative conduct should not be permitted greater retroactive powers because it then found no basis for reducing Hope's filed East Ohio rate in any amount.

The record also shows that the time involved in this case, referred to in Cleveland's brief, was not caused by Hope. All of Hope's direct evidence was in by the summer of 1940 and the Commission then delayed the presentation of its evidence until the spring of 1941 (Tr. 1970, 2175-2176). Thus what the petitioners are really contending for is that the Commission can commence an investigation of rates which at that time are wholly reasonable on any theory, continue it for years, and finally determine that in some of these years the rate was "unlawful" and fix a hindsight rate for these years retroactively and so Cleveland states (Cleve. Brief, 75).

Had Congress intended any such power in the Commission it could easily and would obviously have said that the Commission's rate order would be effective from the date of the filing of a complaint or the initiation of an investigation. This it did not do. If Cleveland desires to have the Natural Gas Act amended to accomplish this result its forum is Congress and not this Court. Congress, we submit, would not legislate as the petitioners request this Court to legislate.

Nor is there anything in *Atlantic Coast Line Railroad v. Florida*, 295 U. S. 301 and *United States v. Morgan*, 307 U. S. 183, referred to by the petitioners (Com. Brief, 120-121; Cleve. Brief, 66-69), which supports the Commission's usurpation of retroactive rate-making power in this case. In both cases the federal regulatory agency had issued rate orders which were subsequently held invalid, solely by reason of procedural defects. In both cases the lower court, sitting as a court of equity, had control of the disposition of the difference between the old rates and the new rates thus invalidly prescribed. In both cases the regulatory agency subsequently and validly held the rates prescribed in the original order reasonable. All this Court held was that the court of equity below should dispose of the differences arising during the period *after* the first order in

accordance with the findings made by the regulatory agency. There was, and could be, no holding substaining the power of a regulatory agency to determine and fix "lawful" rates for any period before the original rate order was entered, as the Commission sought to do here.

The Commission's excursion beyond its statutory rate-making powers in the present case was properly curbed by the Circuit Court of Appeals.

## B. THESE RETROACTIVE DETERMINATIONS ARE ARBITRARY AND INVALID.

Wholly apart from its lack of statutory authority to make retroactive rate determinations, those made by the Commission in this case are otherwise arbitrary and invalid. As to this we note:

1. They are based upon the Commission's same unlawful, arbitrary and unconstitutional bookkeeping theories of rate regulation and findings as to rate base, rate of return and operating expenses which it applied in its "Order Reducing Rates." Everything we have heretofore said thereon applies equally to the Commission's figures as to past rates.

2. They are based on the arbitrary assumption that Hope has paid less than $195,000 of federal income taxes in the years 1939, 1940, 1941 and 1942 whereas as we have seen Hope's actual taxes were $4,500,000 more than this (*supra*, p. 104).

3. In addition, the Commission entirely ignored the recommendation of its own counsel that it use the average period 1937-1940 in considering the reasonableness of past rates. Instead it made separate and individual determinations solely for the years 1939 and 1940, considering each year singly and separately in retrospect, just as if each year's business was a wholly separate operation, which could be successfully predicted on January 1 of that year.

In so doing the Commission adopted what Commissioner Manly in the course of oral argument almost characterized as "the rubber ball theory" of fixing rates when he said to Cleveland's attorney (Tr. 6896):

"• • • you do not have a rate bouncing up and down from year to year, do you?"

The Commission's "rubber ball theory" of retroactive rate making prescribes a standard of conduct under the Natural Gas Act with which no natural-gas company can possibly comply. The results of a year's operation are not known accurately until the company's books are closed in the spring of the following year. Nevertheless on this theory, on January 1 of 1937 Hope should have foreseen that its 36¢ average rate would be too high for that year as its business finally worked out and reduced it to 32.7¢. On January 1, 1938 it should have foreseen that 32.7¢ would be too low for 1938 and raised it to 39.1¢, and so on indefinitely. The Commission holds that Hope should have done just this and that it violated the Natural Gas Act because it did not.

This utter impracticability the Circuit Court of Appeals necessarily recognized (R. IV, 203).

Petitioners argue (Com. Brief, 122; Cleve. Brief, 77) that *West Ohio Gas Co. v. Public Utilities Commission of Ohio*, 294 U. S. 63, 79, demonstrates this holding by the court below as its "final error." There the Ohio Commission was acting under the special ordinance appeal provisions of the Ohio statutes, under which it is expressly given power retroactively to substitute just and reasonable rates for the specific ordinance period if it finds the ordinance rate appealed from is invalid (Ohio General Code, §§ 614-44 *et seq.*; 294 U. S., 66, 80). The utility can, as it there did, suspend the ordinance rate and continue collection of its pre-existing higher rate by giving bond to refund any excess over the rate finally fixed or approved by the Ohio Commission (*ibid.*; see *Cleveland* case, *supra*, n. 9). Thus the utility

commits itself to abide by future retroactive rate orders, if valid, in exchange for the right to continue higher collections. It is of course entitled to have its refund liability determined on the facts actually prevailing during the ordinance period, as this Court held. But in absence of this commitment under these special ordinance appeal sections, it is not under the Ohio statutes subject to retroactive rate and refund orders, and is not expected to guess each year with absolute precision what the Ohio Commission would decide its rates should have been upon subsequent survey. *Public Utilities Commission of Ohio v. United Fuel Gas Co., supra,* pages 127-128.

This citation of the *West Ohio* case demonstrates that what Cleveland and the Commission attempted to do in the present case was to add to the Natural Gas Act the special features and to apply the particular considerations governing retroactive rate determination in the case of municipal rate ordinances in Ohio, with which Cleveland is familiar, but which in Ohio are added to the law by special statutory provision. The court below properly set aside this attempt.

## CONCLUSION.

For the foregoing reasons it is respectfully submitted that the judgment below should be affirmed.

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October 12, 1943.

# APPENDIX A.

## The Legislative History of Section 6 of the Natural Gas Act.

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## THE LEGISLATIVE HISTORY OF SECTION 6 OF THE NATURAL GAS ACT.

Section 6 of the Natural Gas Act was copied directly from Section 208 of the Federal Power Act, which was enacted as part of the Public Utility Act of 1935. This Public Utility Act of 1935, as originally introduced (Senate Bill 1725 and House Bill 5423, 74th Congress, 1st Session), included a provision as to the rate base applicable both to Title II of the Act (the Federal Power Act) and Title III (regulating natural-gas companies), as follows:

> "Sec. 211. (a) The Commission shall have power to ascertain for the purposes of this title and title III the actual legitimate prudent cost of the property of every public utility, and every fact which in its judgment may or does have any bearing on the determination of such cost.
>
> "• • •
>
> "(c) In determining just and reasonable rates, the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question."

The Senate Committee on Interstate Commerce reported out a revised version of the Public Utility Act of 1935 (S. 2796), omitting Title III. The section quoted above was renumbered as Section 208 of the Federal Power Act and, as introduced, reported and passed by the Senate, provided as follows:

> "ASCERTAINMENT OF COST OF PROPERTY; RATE BASE
>
> "SEC. 208. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every public utility, the depreciation therein, and every fact which in its judgment has any bearing on the determination of such cost or depreciation.
>
> "(b) Every public utility upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed

regarding the cost of all additions, betterments, extensions, and new construction.

"(c) In determining just and reasonable rates, the Commission shall fix such rate as will afford the public utility an opportunity to earn a fair return on a rate base not in excess of the actual legitimate cost of the property used and useful for the service in question less the accrued depreciation therein." [43]

The report of the Senate Committee on Interstate Commerce on this bill pointed out that this section represented an attempt to induce the Supreme Court to uphold prudent investment as the rate base (see Statement A, page 147 below).

The House Committee on Interstate and Foreign Commerce substantially amended the Senate Bill (S. 2796) and changed Section 208 of the Federal Power Act to read as follows, in which form it was passed by the House and eventually enacted by Congress:

"ASCERTAINMENT OF COST OF PROPERTY

"Sec. 208. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every public utility, the depreciation therein, and, when found necessary for ratemaking purposes, other facts which bear on the determination of such cost or depreciation, and the fair value of such property.

"(b) Every public utility upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction." (49 Stat. 853, 16 U. S. C. Sec. 824g)

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[43] Quoted from the three printed copies of S. 2796 in the Senate as follows: S. 2796, introduced, read twice and referred to the Committee on Interstate Commerce May 7 (calendar day, May 9), 1935; S. 2796 (Report No. 621), Calendar No. 651, reported to the Senate, May 13 (calendar day, May 14), 1935; S. 2796, passed the Senate May 13 (calendar day, June 11), 1935.

The report of the House Committee pointed out that the provision in Section 208(c) of the Federal Power Act as passed by the Senate, quoted above, that cost be used as the rate base, was omitted from the revised bill reported to the House (see Statement B, p. 148 below). In explaining this change in Section 208 upon the floor of the House, Congressmen Lea and Cole, respectively chairman and a member of the sub-committee which redrafted the bill, pointed out that the change was necessary in order to make the section constitutional and that it would require the consideration of reproduction cost as well as original cost in the rate base (see Statements C and D, pages 149 and 150 below).

In the conference between the Senate and the House upon the various amendments, Section 208 of the Federal Power Act as passed by the House was not changed but was accepted by the Senate, and was enacted in the form quoted last above (see Statement E, page 152 below).

The Natural Gas Act itself was enacted in the 75th Congress, 1st Session, as H. R. 6586, originally introduced by Congressman Lea as H. R. 4008. Section 6 of the Natural Gas Act as initially introduced and as finally enacted was identical with Section 208 of the Federal Power Act as finally enacted except for the substitution of "natural-gas company" for "public utility." Section 14 of the Crosser Bill, H. R. 5711, which was introduced as an alternative to Mr. Lea's bill and considered by the House at the same time, was likewise identical with Section 208(a) of the Federal Power Act.

At the hearings on the Natural Gas Act before the House Committee on Interstate and Foreign Commerce on March 24, 1937, Mr. Harry R. Booth, counsel for the Illinois Commerce Commission, and Dr. Milo R. Maltbie, Chairman of the New York Public Service Commission, appeared as advocates of the Act. In the discussion between them and the members of the Committee it was apparent that everyone considered that under the Act the present fair value of

a natural-gas company's properties, determined upon consideration of original cost and reproduction cost, would be the rate base (see Statement F, p. 154 below). In the Committee report to the House and the debate upon the Natural Gas Act there was little discussion of the rate base but Congressman Lea, then Chairman of the House Committee, referred to the Committee's previous consideration of the provisions of Section 6 and stated that it had decided to cut out detailed provisions as to the rate base and "stay with the safe and unquestionably constitutional provision we have here" (see Statement G, page 158 below).

Section 6 of the Natural Gas Act was passed by the House and by the Senate without further comment.

Statement A

## SENATE COMMITTEE REPORT ON THE PUBLIC UTILITY ACT OF 1935

"74th Congress, 1st Session" — SENATE — Report No. 621

### "PUBLIC UTILITY ACT OF 1935

"May 13 (calendar day, May 14), 1935.—Ordered to be printed

"Mr. WHEELER, from the Committee on Interstate Commerce, submitted the following

### REPORT

(To accompany S. 2796)

* * * * *

(Page 20):

"G. *Rates.*—Section 205 (b), transferred from section 202 (c) of the original bill, has been modified by prohibiting merely undue, instead of all, preferences or prejudices in rates. The provisions defining with particularity the power of the Commission to investigate single rates and to fix standards of service (former secs. 208 (b) and 210) and the section authorizing the issuance of reparation orders (former sec. 213) have been eliminated. They are appropriate sections for a State utility law, but the committee does not consider them applicable to one governing merely wholesale transactions. The provision requiring the fixing of rates upon the basis of the actual cost of the property devoted to the service in question (now sec. 208 (c)) has been modified so as to make clear that the rate base is to be no higher than the actual legitimate cost of the property. Furthermore, it is expressly provided that the accrued depreciation of property is to be deducted from the rate base, and the section (302 of S. 1725) requiring the sinking-fund method of depreciation accounting has been

eliminated. This practice is contrary to that of most of the States in the country and the committee is of the opinion that its introduction in a Federal statute would cause unnecessary confusion and hardship."

* * * * *

(Page 52):

"Section 208. Ascertainment of Cost of the Property

"Subsection (a) authorizes the Commission to investigate and ascertain the actual legitimate cost of the property of every public utility and the depreciation therein.

"Subsection (b) provides that every public utility upon request shall file with the Commission an inventory of its property and a statement of the original cost thereof and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction.

"Subsection (c) provides that in determining just and reasonable rates the Commission shall fix such rate as will afford the utility an opportunity to earn a fair return upon a rate base not in excess of the actual legitimate cost of the property used and useful for the service in question, less the accrued depreciation therein.

"Rate regulation must eventually be based on prudent investment. Recent decisions of the Supreme Court, and the respect which the Court has always paid to the constitutional interpretations of the coordinate branches of the Government, afford grounds for hope that this rule which the committee considers essential to effective rate regulation will be sustained if the Congress should now definitely adopt it as a legislative policy. This would present the case to the Court in an entirely new light."

* * * * *

**Statement B**

## HOUSE COMMITTEE REPORT ON THE PUBLIC UTILITY ACT OF 1935

"74th Congress, 1st Session } HOUSE OF REPRESENTATIVES { Report No. 1318

### "PUBLIC UTILITY ACT OF 1935

"June 24, 1935.—Committed to the Committee of the Whole House on the state of the Union and ordered to be printed

"Mr. RAYBURN, from the Committee on Interstate and Foreign Commerce, submitted the following

**REPORT**

(To accompany S. 2796)

* * * * *

(Page 30):

"Section 208. Ascertainment of Cost of Property

"The Commission is authorized under subsection (a) to ascertain the actual legitimate cost of the property of public utilities, the depreciation therein, and, when necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property. As an aid to such ascertainment, the public-utility companies may be required, under subsection (b), to file with the Commission an inventory of all or any part of their property, a statement of its original or historical cost and to keep the Commission advised as to the cost of additions, betterments, extensions, and new construction.

"In the Senate bill subsection (c), making the cost as ascertained under subsection (a) the base upon which the Commission shall fix rates, is omitted from the bill as reported."

* * * * *

**STATEMENT BY CONGRESSMAN LEA ON THE PUBLIC UTILITY ACT OF 1935 IN THE HOUSE OF REPRESENTATIVES, JUNE 28, 1935.**

(Congressional Record, Vol. 79, Part 9, p. 10378, 74th Cong., 1st Sess.):

* * * * *

**"RATES**

"This bill also involves the question as to the rate base that should apply in governing the rates for public utilities. The bill contains the general rule that rates must be just and reasonable. The committee would like to have been able to provide a better standard of valuation as a rate-making base, but after considering the question fully we determined it would be a futile thing to do. After the recent decision of the Supreme Court in a Maryland telephone case it is practically a futile thing, in my judgment, for any legislative body to try to write a rate-making base.

"The Constitution has established a rate-making base that cannot be decreased or minimized; so when a legislative body attempts to write a rate-making base, we may add to the burden that may be placed upon the consumers of electricity, but we cannot subtract from their burden on account of anything that we may write in the way of a rate base. So without attempting to go any further, we have provided that rates shall be reasonable and just, and under the Supreme Court decision that means that the valuation must be based upon the current value of the property.

"Cost is an element of the rate base, but only an element. The cost of reproduction might be an element, but only an element. The one question is the current value of the property, and the Supreme Court will permit no deviation from this principle."

* * * * *

**Statement D**

**STATEMENT BY CONGRESSMAN COLE ON THE PUBLIC UTILITY ACT OF 1935 IN THE HOUSE OF REPRESENTATIVES, JUNE 28, 1935.**

(Congressional Record, Vol. 79, Part 9, p. 10384, 74th Cong., 1st Sess.):

* * * * *

"* * * The Commission is empowered to determine the value of properties used in production and transmission of electric energy and to fix the rates and charges therefor. This is confined, naturally, to such part of the business as the Commission controls, leaving to the States that which is of intrastate character. The recent decision of the Supreme Court in the case of West and others against Chesapeake & Potomac Telephone Co. of Baltimore City, delivered June 3, 1935, has been most helpful in connection with framing this important section. There is nothing more important, in our judgment, when we come to deal with this entire subject than the setting up of necessary machinery whereby the Federal Government can appraise and value, for rate-making purposes, that part of the electric-utility business which is interstate in character and beyond the jurisdiction of the State regulatory agencies. Much of the delay and expense incident to rate cases conducted by the States has been directly attributable to the technicalities raised and the expense necessary for the State commission to properly cope with the matter.

"The bill was originally drawn on the theory that for the purpose of just and reasonable rates the Commission should determine the actual and prudent cost of the property less accrued depreciation thereon. Mr. Justice Roberts, in delivering the opinion of the Court in the Telephone case, *supra*, made it very clear that such a provision would be unconstitutional and it was therefore stricken out. In lieu thereof there is new language and while that may not be entirely clear, it was inconceivable to those of us serving on the subcommittee that any State or National commission establishing valuation of a public utility for rate purposes should do other than follow the very clear formula

sideration alone as to value such as legitimate cost or prudent cost, is sufficient; but all elements must be taken into account, such as reproduction value, actual cost, going value, proper depreciation allowance, so that in the end, after considering the aforegoing and such other elements of value as are essential, leave a figure upon which the rate established thereon will not be confiscatory. The dissenting opinion by Mr. Justice Stone on this case was also most helpful in clearing up the difficulties the commissions and courts have had in stating with definiteness that the theory of rate making outlined in Smith and Ames is still the rule, and if not, how it has been changed, by later decisions."

* * * * *

**Statement E**

## CONFERENCE REPORT ON THE PUBLIC UTILITY ACT OF 1935

"74th Congress, 1st Session" **HOUSE OF REPRESENTATIVES** "Report No. 1903"

### "PUBLIC UTILITY ACT OF 1935

"August 23 (calendar day, August 24), 1935.—
Ordered to be printed.

"Mr. RAYBURN, from the committee on conference, submitted the following

### CONFERENCE REPORT

(To accompany S. 2796)

"The committee of conference on the disagreeing votes of the two Houses on the amendment of the House to the bill (S. 2796) to provide for the control and elimination of public-utility holding companies operating, or marketing securities, in interstate and foreign commerce and through the mails, to regulate the transmission and sale of electric energy in interstate commerce, to amend the Federal Water Power Act, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

"That the Senate recede from its disagreement to the amendment of the House and agree to the same with an amendment as follows:

"In lieu of the matter proposed to be inserted by the House amendment insert the following:

"*That this act may be cited as the 'Public Utility Act of 1935.'*"

* * * * * *

(Page 53):

"*Ascertainment of Cost of Property*

"*Sec. 208. (a). The Commission may investigate and ascertain the actual legitimate cost of the property of*

*every public utility, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation, and the fair value of such property.*

*"(b) Every public utility upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction."*

* * * * *

**Statement F**

**HEARINGS BEFORE THE HOUSE COMMITTEE ON THE NATURAL GAS ACT**

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**"NATURAL GAS**

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**HEARING**

**Before**

**THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE HOUSE OF REPRESENTATIVES**

**Seventy-Fifth Congress**

**First Session**

**on**

**H. R. 4008**

**To Regulate the transportation and sale of natural gas in interstate commerce and for other purposes**

---

**MARCH 24 AND 25, 1937**

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Printed for the use of the
Committee on Interstate and Foreign Commerce

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United States
Government Printing Office
Washington: 1937

135605

* * * * *

(Page 34):

"MR. MAPES. Both the Crosser and the Lea bills propose to give the Commission the power to fix a just and reasonable rate for gas.

"What do you consider a just and reasonable rate?

"MR. BOOTH. Well, if you will excuse me, Mr. Mapes, I am merely a lawyer, and the question as to what is a fair and reasonable rate is normally left to experts of a technical character.

"You mean what is the fair and reasonable return upon the investment, or do you mean what is a reasonable, fair, and reasonable wholesale rate?

"MR. MAPES. You are the attorney for the Illinois Public Utility Commission.

"MR. BOOTH. That is correct.

"MR. MAPES. The bills provide that the Commission shall have the authority to fix a just and reasonable rate.

"Does that mean a 5-percent return upon the investment, or a 10- or a 15-percent return?

"MR. BOOTH. Well, that all depends upon the individual circumstance. It will—the Commission will undoubtedly allow a fair return upon the fair value of the property of the pipeline company or a producing company devoted to public service."

* * * * *

(Page 36):

MR. COLE. Your amendment, as proposed to this bill, provides for a temporary rate which is pretty much of a guessing proposition, is it not?

"MR. BOOTH. Oh, no; not at all.

"MR. COLE. Why not?

"MR. BOOTH. As a matter of fact, it is much less of a guessing proposition than the determination of the final rate case as laid down by the decisions of the courts, because that amendment suggests that a temporary rate be fixed upon the original cost less accrued depreciation of the physical property of said company used and usable in the gas service plus a reasonable amount for working capital, * * *.

"* * *

"* * * the fixing of the tentative rate base, which is to be determined on the basis of the original cost, eliminates the guesswork that is usually involved in determination of fair value based upon reproduction cost basis and that is a determination arrived at from the testimony and estimates of engineers. Our courts have held that in the determination of fair value, original cost and reproduction cost is to be considered in arriving at the fair value of the

property of the utility company. The New York Court of Appeals has recently sustained the temporary rate provision just referred to."

* * * * *

(Page 37):

"Mr. Booth. I am suggesting this, that because of the time and the delay which usually occur in determination of a final rate that the Commission arrive at a tentative or temporary rate base by taking one of the factors which the courts have said must be considered, in determining fair value, namely, the original cost, and since the original cost can be determined and should be determined with a high degree of accuracy, and since it will give the utility company or the company that is being regulated, presumably, a return upon the money that actually has been expended in the construction of its property and facilities, there does not seem to me anything highly unfair about that.

"Now, it is true that when the Commission determines the final rate, it will then give consideration both to the original cost, less depreciation, and the reproduction cost, less depreciation, and arrive at the final rate base.

"Mr. Cole. Yes; and those elements which you say the Commission would consider in establishing a final rate, as I understand the law, are required to be taken into consideration.

"Mr. Booth. That is right.

"Mr. Cole. You cannot establish a rate solely on original cost."

* * * * *

(Pages 114-115):

"The Chairman. In brief, how do you fix your temporary rate?

"Mr. Maltbie. The temporary rate is fixed upon the basis, according to the law, of the original cost of the physical properties, less depreciation.

"Now, we make an investigation. In some cases the books of the company show the original cost of the property and we have an order out now which will require all of the utilities outside of the railroads in the State of New

York to produce an inventory and show the original cost of their property before the end of this year.

"So, if the book shows we get original cost from the books. If the books do not show we are allowed to estimate the original cost.

"Also the depreciation, if the books show accrued depreciation, we take that from the books. If we do not think that they do, we can quickly make an estimate or fix the minimum amount that we will deduct and deduct that from the original cost, getting the original cost less depreciation, taking all of the physical property, material, supplies, as well as plant. Then, an analysis of the operating expenses show what the revenue should be and we can fix a rate of return on it and do fix it. So far there has not been a temporary rate fixed on that basis reversed in the State of New York; not one.

"THE CHAIRMAN. In effect you give consideration to every fact that you do in fixing the final rate, but you act hurriedly and save yourselves as to the constitutional question in the final rate where you pay the company any deficiency that may be found due.

"MR. MALTBIE. No, Mr. Chairman; I have not included reproduction cost less depreciation.

"Now, according to the law of the land original cost and reproduction cost less depreciation must be taken off of each one and must be considered. There are a number of other things that might be considered before fixing a final rate, but in a temporary rate we do not need to give any consideration to reproduction cost less depreciation; none at all."

* * * * *

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Note: The persons participating in the foregoing discussion were:

Mr. Mapes, Congressman Carl E. Mapes, member of the Committee.

Mr. Booth, Harry R. Booth, Acting Counsel for the Illinois Commerce Commission.

Mr. Cole, Congressman William P. Cole, Jr., member of the Committee.

Mr. Maltbie, Milo R. Maltbie, Chairman, Public Service Commission of New York.

The Chairman of the Committee, Congressman Clarence F. Lea.

**STATEMENT BY CONGRESSMAN LEA ON H. R. 6586 IN THE HOUSE OF REPRESENTATIVES, APRIL 28, 1937.**

In the course of the reading of the Natural Gas Act (H. R. 6586, Seventy-Fifth Congress, 1st Session), Congressman Poage offered an amendment to Section 6 requiring the Commission in valuing a natural-gas company's properties for rate case purposes to exclude the value of the properties used for industrial gas, and further providing that it should be conclusively presumed that such property was a percentage of the total property equal to the ratio of the industrial gas to all gas sold by the company. Congressman Lea, Chairman of the House Committee on Interstate and Foreign Commerce, opposing the amendment, said (Congressional Record, Vol. 81, Part 6, p. 6729):

"* * * I think the standard proposed here to cover the action of the committee, in the exercise of its powers, is not authorized by the Constitution.

"* * * I believe under the definition of fair value as defined by the Supreme Court, the amendment would make it the duty of the Commission to do a thing that is not justified by the interpretation of the term 'fair value.' We spent a great deal of time on this section, and we had before us another section, such as the gentleman has here suggested, going into more detail, but, in the meantime, a Supreme Court decision came out that made it very clear we should cut out such details and stay with the safe and unquestionably constitutional provision we have here."

## APPENDIX B.

**Original Cost is a Matter of Actual Expenditures, Not of Bookkeeping, and Where Not Shown by Records is to be Estimated.**

### Treatises.

Spurr, Henry C. *Guiding Principles of Public Service Regulation*, Volume I, pp. 290-299.

"The term 'original cost' has been defined as the sum of money expended for the property in use at the time of the valuation for the benefit of the public. It has been said to be not what the original property cost, but rather what the present property cost."

* * *

"Original cost of construction does not necessarily mean book cost. * * * It means actual bona fide cash cost of existing property.[46] The cost shown by the books sometimes referred to as book value may not fairly represent the amount of the investment because the capital account may be overcharged or the operating account undercharged.[47] In the early days there was no uniform system of accounting and, whereas frequently items were unfairly added to the assets column, to balance the liabilities, on the other hand, items which should properly have been classified as fixed capital expenditures were frequently included in the operating expenses.[48]

* * *

"If for any reason the actual cost cannot be obtained from the books or records, it may be estimated. This estimated cost has been called historical cost, probably because the estimate is based upon a history of prices prevailing at the date of the installation.

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"[46] *Re Mid-Crosstown R. Co.* (1914) 5 P. S. C. R. (1st Dist N. Y.) 22;
*Re Indianapolis Water Co.* (Ind.) P. U. R. 1917 E, 556."

"[47] *Re Madison City Water Works* (1909) 3 Wis. R. C. R. 299.

"[48] *Re New York State Railways* (N. Y.) P. U. R. 1921 C, 496; *Mairies v. Flatbush Gas Co.* (N. Y.) P. U. R. 1920E, 930."

This would seem to be a proper use of the term, but it has not always been employed in this sense. It has sometimes been considered as synonymous with original cost.

• • •

"The method of estimating original cost is the same as that employed in determining reproduction cost except that in the case of original cost there may be and usually are applied several average unit costs varying in amounts according to the period during which the particular portions of the plant were constructed, whereas, for reproduction cost, there is but one average unit cost applicable to all units of the same kind.[59] In estimating original cost, current prices may be obtained from information gathered from the company's original vouchers and contracts, manufacturers' quotations as of the time when the installations were made, catalogues, market reports, and prices current for similar material in other locations. Labor unit costs may be computed from information gathered from the company's pay roll and rates of pay in effect in other states during the period.[60]"

"Out of the Mail Bag," *Public Utilities Fortnightly*, Vol. 17, No. 4, Feb. 13, 1936, p. 250.

"Standardized definitions of the various kinds of 'cost' should simplify regulatory proceedings. The following suggestions are tendered for consideration:

" 'Original cost' to mean the total outlay of actual dollar costs (or equivalent) of the now existing property, from the date of the initial expenditure to the date of inquiry. This information to be actually obtained from the vouchers, invoices, etc., for the entire period, and applying only to those properties where there are continuous, reliable, accurate, detailed records of construction costs throughout the entire history and bearing no relation to changes in ownership.

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"[59] *Public Service Commission v. Nevada-California Power Co.* (1913) 3 Ann. Rep. Nev. P. S. C. 261, 276.

"[60] *Re Flint* (Mich.) P. U. R. 1922A, 385, 393."

"'Historical cost' to mean an inventory of the physical property as it actually exists at the date of inquiry, to which is applied the correctly weighted average prices that prevailed during the construction period. This plan may be used where the records of original capital expenditures are not obtainable or where they are so generally inadequate as to be unreliable. Changes in ownership to be given no consideration.

"'Original-historical cost' to mean 'original cost' as first defined above, in so far as dependable construction records are available for a substantial period of time, and for that time in which there is a partial lapse of such records, a list of the now existing property which was constructed during such lapse periods shall be made and correctly weighted average prices of labor and material, etc., effective during such period applied thereto. This also ignores changes in ownership."

Whitten, Robert H. *Valuation of Public Service Corporations. Legal and Economic Phases of Valuation for Rate Making and Public Purchase. Supplement.* (New York: The Banks Law Publishing Co., 1914.) pp. 834-836.

"The term 'actual cost' may possibly be taken in three senses: (1) book cost; (2) the first cost of the original units; (3) the first cost of the identical units now in use. The confusion has arisen from identification of actual cost with book cost or first cost of original units, or both. Properly speaking, actual cost is the first cost of the identical units now in use. In the past both the terms 'actual cost' and 'original cost' have been used, the term 'original cost' being most frequently employed. The term 'actual cost' should be substituted, as the term 'original cost' appears to mean the first cost of the original units.

"Book cost would be the same as actual cost, *i.e.*, the first cost of the identical units now in use, assuming that approval accounting principles had been strictly applied from the initiation of the enterprise. Correct accounting principles are, however, of comparatively recent acceptance and application. Book costs as actu-

ally developed often include discount on securities issued, exorbitant profits to promoters, cost of replacing wornout or superseded property, dividends paid out of capital and money sunk in unsuccessful experiments. On the other hand, book cost may exclude various actual costs, such as improvements and betterments constructed out of earnings and overhead construction charges included in operating expenses.

* * *

"Assuming that existing accounts and records may be only partially relied upon, an estimate of actual cost can be ascertained by much the same methods as and with greater accuracy than an estimate of reproduction cost. The first essential in either case is a complete inventory of property units in use. A second requirement in both cases is the determination of the approximate time at which each such unit was installed. This information is essential under the reproduction method in order to determine the age and accrued depreciation of each unit or class of units. It is essential under the actual cost method in order that unit costs varying with the period of purchase may be applied. Records are available showing for any period the prevailing prices of labor and materials entering into construction costs. From such records, supplemented in many cases by fragmentary data obtainable from the books of the company, it is possible to apply unit costs."

Willard J. Graham and Wilber G. Katz, *Accounting in Law Practice* (Callaghan and Company, Chicago, 1938), p. 228.

"Literally, original cost is the total amount (in dollars) that has been expended by the utility at one time or another in the construction or acquisition of the properties which are at the time of the inquiry included in the rate base as being 'used and useful' in the operation of the business. This amount is readily determinable from the books of account, if they have been properly kept since the founding of the business. In the absence of proper records it is often necessary to substitute an estimate of what the cost of the prop-

erties should have been at the date of their acquisition."

Bemis, Edward W., "Original Cost as the Chief Basis for Fair Value." 1 *Utilities Magazine*, No. 3 (1915) p. 36:

"By original cost in the case of physical assets is meant the actual cost of the property now in use."

Erickson, Halford, "Relation Between the Valuation and the Rate of Return Thereon." *N. A. R. C. Proceedings of 25 Annual Convention*, 1913, p. 435.

"The original cost of the plant and of its business may be defined as the amount of money judiciously expended on the property used and useful in the service and on the development of the business."

Smith, Nelson Lee. *The Fair Rate of Return in Public Utility Regulation.* (Boston and New York: Houghton Mifflin Company, 1932), p. 22.

"The original cost method has been styled 'original cost to date,' 'historical cost,' and 'investment' or 'prudent investment' cost. Although these various terms are not always uniform in meaning, the original cost appraisal yields, not the cumulative costs of superseded as well as existing properties, but, rather, the sums actually paid for the units now in service when those items of property were acquired. But before values are assigned according to either one of these price methods, a physical count, or inventory, of the property must be made."

Hartman, Harleigh H., *Fair Value* (The Meaning and Application of the Term "Fair Valuation" as used by Utility Commissions) (Houghton Mifflin Company, The Riverside Press, Cambridge, 1920) p. 109.

"The campaign to discredit original cost failed because the propaganda could not obscure the fact that such valuation is not dependent upon a complete record, but may be estimated just as reproduction cost is calculated, and with as great or even greater accuracy. Original cost can be figured upon the same inventory as reproduction cost by merely substituting prices of

material and labor, which were current at the time the items inventoried were put into the plant, for the present or normal price used in the reproduction cost appraisal. The original prices may be secured in part from the records of the firm and in part from the market quotations of the period."

**United States Supreme Court.**

*City of Knoxville v. Knoxville Water Company*, 212 U. S. 1.

"When, therefore, a public regulation of its [a utility's] prices comes under question the true value of the property then employed for the purpose of earning a return cannot be enhanced by a consideration of the errors in management which have been committed in the past." (p. 14.)

*Doyle v. Mitchell Brothers' Company*, 247 U. S. 179.

"Nor is the result altered by the mere fact that the increment of value had not been entered upon plaintiff's books of account. Such books are no more than evidential, being neither indispensable nor conclusive. The decision must rest upon the actual facts, which in the present case are not in dispute." (p. 187.)

*Lincoln Gas & Electric Light Company v. City of Lincoln*, 250 U. S. 256.

"Again, we question the propriety of the master's treatment of 'going value,' which he seems to have estimated at less than otherwise he would have placed it upon the theory that the company's business had been developed, at the expense of the public, in the expenditure of past earnings exceeding a fair return upon the capital invested, and this without any finding, or any clear evidence to which our attention has been called, that past earnings were excessive." (p. 267.)

*State of Missouri ex rel. Southwestern Bell Telephone Company v. Public Service Commission of Missouri*, 262 U. S. 276.

(See quotation at pp. 36-37 above.)

*Board of Public Utility Commissioners v. New York Telephone Company*, 271 U. S. 23.

(See quotation at pp. 50-51 above.)

*Columbus Gas & Fuel Co. v. Public Utilities Commission of Ohio*, 292 U. S. 398.

"Leases bought with income, proceeds of the sale of gas, and *thus paid for in the last analysis through the contributions of consumers*, ought not in fairness to be capitalized *until* present or imminent need for use as sources of supply *shall have brought them into the base* upon which profits must be earned." (p. 407)

**Federal.**

*Garden City v. Garden City Telephone, Light & Mfg. Co.*, 236 Fed. 693, P. U. R. 1917B, 779 (C. C. A. 8th, 1916).

The Court rejected the city's claim that the utility was not entitled to a full return upon the present value of its property because it had been paid for from earnings, saying:

"No judicial authorities are cited on this point. In the first place there is no evidence that the company ever charged excessive rates until about the commencement of the controversy out of which this litigation arose; but, if it did so, the various parties from whom they were extorted had a cause of action against the company to recover the excessive rates until the statute of limitations had run. Presumptively they were not the identical persons who are now the consumers from the appellee. It is the practice of courts to try cases one at a time; and if the appellee has put money into the development of the plant, the court in this case could not stop to inquire just how it acquired the title to the money. Such a system would involve an investigation into the wholly collateral matter of the entire past life of litigants and the manner in which they acquired the money invested in a private enterprise." (p. 697.)

*Brooklyn Borough Gas Co. v. Prendergast*, 16 F. (2d) 615, P. U. R. 1927A, 200 (D. C., E. D. N. Y., 1926).

"Book cost in a confiscation rate case is not decisive of value, and quite properly, for it indicates the price of acquisition of property, which is one thing, and not present value, which is quite another thing." (p. 625.)

*City of Minneapolis v. Rand*, 285 Fed. 818, 822-824 (C. C. A. 8th, 1923).

*Monroe Gaslight & Fuel Co. v. Michigan Public Utilities Commission*, 292 Fed. 139, 147, P. U. R. 1923E, 661 (D. C., E. D. Mich., 1923).

*Indiana Bell Telephone Co. v. Public Service Commission of Indiana*, 300 Fed. 190, 197, P. U. R. 1925A, 363 (D. C., D. Ind., 1924).

*Wichita Gas Co. v. Public Service Commission of State of Kansas*, 3 F. Supp. 722, 726 (D. C., D. Kans., 1930), modified and affirmed, 290 U. S. 561.

*Illinois Bell Telephone Co. v. Moynihan*, 38 F. (2d) 77, 86, P. U. R. 1930B, 148 (D. C., N. D., Ill., 1930), reversed, *Smith v. Illinois Bell Telephone Company*, 282 U. S. 133.

*Pacific Gas & Electric Co. v. Railroad Commission of California*, 26 F. Supp. 507, 514, 26 P. U. R. (N. S.) 1 (D. C., N. D. Calif., 1938).

**Interstate Commerce Commission.**

*Texas Midland Railroad*, 75 I. C. C. 1 (1918).

In determining the $2,892,361 "original cost" or "investment" as evidence of fair value, the Commission included substantial sums which had originally been charged to expense or to income. The Commission explained the method followed by its staff as follows:

"When the bureau realized that it was impossible to obtain accurate information from the books of the com-

pany concerning original cost to date, it reconstructed the accounts upon what it believed to be a proper basis. To accomplish this it was necessary to examine every voucher which had been issued by the carrier for the payment of money since 1893, the date when its operations began." (p. 10.)

"It became evident that the investment account of this carrier had not been correctly kept and an attempt was made to restate that account in accordance with our accounting rules now in force. For this purpose the entire books of the Texas Midland Railroad were in effect rewritten, every voucher being examined and reassigned as far as possible." (p. 98.)

*Elgin, Joliet & Eastern Railway Company*, 84 I. C. C. 587, 592 (1924).

*New York, Philadelphia and Norfolk Railroad Company*, 97 I. C. C. 273 (1925).

"The question to be determined is whether the voluntary act of the carrier in charging only a portion of the cost of road and equipment to its investment account estops it from thereafter claiming as investment the additional cost not charged out properly in the first instance. Under the mandate of the statute we are required to find the value of the property of the carrier. The investment account, when properly stated, constitutes evidence of value to which consideration must be given. In this case the investment in property being devoted to carrier purposes on valuation date is incompletely stated in that costs incurred therefor were entered as charges to income. If our present system of accounting had been in force when the entries were made the investment account would have included the amount here claimed as proper.

"In previous cases instances have been found where the investment account has been incorrectly kept, capital expenditures being recorded in operating expenses or as charges to income. In order to obtain an accurate statement of investment it has been necessary in such instances to reconstruct the accounts. Here the carrier has presented evidence of costs that have not been in-

cluded in our restated investment figure, although the property was found in ownership and use on date of valuation, was inventoried and is included in our estimates of cost of reproduction new and less depreciation. The evidence is persuasive that the investment figure should be increased by the amount of $733,846.13 and our tentative report will be revised accordingly. * * *" (p. 279.)

*Chicago, Burlington and Quincy Railroad Company*, 134 I. C. C. 1, 19 (1927).

*Hamilton Belt Railway Company*, 149 I. C. C. 126 (1928).

*Depreciation Charges of Telephone and Steam Railroad Companies*, 177 I. C. C. 351, 407 (1931).

**California.**

*Re Los Angeles Gas & Electric Corporation*, P. U. R. 1917 F, 717 (Calif. R. R. Comm., 1917).

"In arriving at the sum upon which to calculate the fair return to the company, I have used an estimate of original cost of the entire plant which is now found in use, and have not depreciated this cost. In other words, I have concluded that the just and reasonable thing to do in this proceeding is to allow the company a return upon its actual investment in this property. This includes money invested regardless of the source from which such money came. For instance, no deduction has been made because a part of the depreciation reserve has been invested in plant, nor has any deduction been made because a part of the earnings of the company in times past have been invested in plant.

"Reinvested earnings are legally as much a part of the stockholders' equity in the property as is the property represented by a direct investment by the stockholders." (pp. 722-723)

*Re City of Los Angeles*, P. U. R. 1916F, 593, 601 (Calif. R. R. Comm., 1916).

*Re Napa Valley Electric Company*, P. U. R. 1925A, 724, 730 (Calif. R. R. Comm., 1924).

**Colorado.**

*Re Mountain States Telephone & Telegraph Company*, P. U. R. 1917B, 198 (Colo. P. U. C., 1917).

"The experience of this Commission discloses that book values of public utilities are of very little assistance in obtaining fair value for rate-making purposes. The methods adopted by the various public utilities in building book values are not uniform, and the accounting methods in the past have been far from uniform, as no regulatory boards were in existence to prescribe the methods of accounting, from which book values could be ascertained. Some public utilities build up enormous book values based on many erroneous assumptions; other utilities—of which class the present utility is one—have not taken into consideration proper methods in building up an adequate book value, as has been disclosed from the testimony in this case." (pp. 286-287)

**District of Columbia.**

*Re Washington Gas-Light Company*, 11 P. U. R. (N. S.) 119 (D. C. P. U. C., 1935).

**Idaho.**

*Boise Artesian Water Co. v. Public Utilities Commission*, 236 Pac. 525, P. U. R. 1926A, 195 (Idaho, 1925).

The Commission excluded overheads from the rate base because there was no evidence that they had actually been expended. The Court reversed, saying:

"The value of a property is not necessarily its cost. Even though constructed economically, the construction cost is a mere evidence of value. The fact, even if it be admitted, that the system was largely built from profits, would not deprive the owner of his right to have the property given its present fair value. And ordinarily, even though the system was built up gradually and out of the profits of the company, and conceding that there is no evidence that any sum was ever actually expended for overheads, we do know that there is a value in the completed property in addition to the mere

naked cost of labor and materials necessarily used in its construction." (pp. 529-530)

**Illinois.**

*Illinois Commerce Commission v. Chicago Telephone Company*, P. U. R. 1924A, 213 (Ill. C. C. 1923).

In holding that original cost could not be ascertained entirely from a consideration of book value, the Commission said:

"Furthermore, it appears that the book value now includes some overhead charges but that others have not been properly charged thereto. There is evidence of record to indicate that some costs of an overhead nature have previously been charged to operating accounts instead of to plant account. While this is an erroneous procedure it does not warrant the Commission in eliminating them from consideration when finding the original cost of the existing property." (p. 226)

**Indiana.**

*Re Indianapolis Water Company*, P. U. R. 1917E, 556, 612 (Ind. P. S. C. 1917).

**Maine.**

*Rich v. Biddeford & Saco Water Company*, P. U. R. 1917C, 982, 999 (Me. P. U. C. 1917).

**Missouri.**

*City of Jefferson v. Capital City Water Company*, 27 P. U. R. (N. S.) 69 (Mo. P. S. C. 1938).

"The city objects to the inclusion of this item [construction overheads] in the estimated original cost on the ground that it was not an actual or recorded cost item, and if it had been incurred, it had previously been charged to operating expenses."

"(1) We are endeavoring to arrive at a proper amount for the estimated original cost of the property as one of the elements to be considered in arriving at present fair value. This being true, the disposition of costs in the accounts of the company are immaterial. If the en-

tire costs of the property had been charged to operating expenses, we would still be obliged, to arrive at a figure for the estimated original cost." (p. 74)

## New York.

*People ex rel. New York State Rys. v. Public Service Commission*, 202 App. Div. 576, 195 N. Y. Supp. 174, P. U. R. 1922E, 675 (3d Dept. 1922).

"With the exception above noted, the commission disallowed these items [overheads], because:

'Otherwise it would be necessary to revise the operating expense accounts by excluding a portion of the salaries of the officials concerned, and such revision would produce larger net earnings.'

"The 'larger net earnings' thus produced would relate to the period when the particular portion of the road under consideration was being organized, constructed, and developed, and would in no way affect present net earnings. It has been held that past losses are not to be considered in determining the rate base and whether the present rate is confiscatory.' *Galveston Electric Co. v. City of Galveston*, 257 U. S. . . ., 42 Sup. Ct. 351, 66 L. Ed. . . . (decided April 10, 1922); *City of Knoxville v. Knoxville Water Co.*, 212 U. S. 1, 14, 29 Sup. Ct. 148, 53 L. Ed. 371. It would seem to follow as a necessary corollary that, if past losses may not be considered in fixing a rate base, neither should past profits be so considered, nor what would have been past profits or 'larger net earnings' by a readjustment of operating expenses.

"We think, therefore, the commission has proceeded on an erroneous principle in excluding these overhead expenses." (p. 176)

*Village of Wellsville v. Maltbie*, 257 App. Div. 746, 15 N. Y. Supp. (2d) 580, 32 P. U. R. (N. S.) 436 (3d Dept., 1939).

*Village of Boonville v. Maltbie*, 245 App. Div. 468, 283 N. Y. Supp. 460, 466-467, 14 P. U. R. (N. S.) 93 (3d Dept. 1935), affirmed 4 N. E. (2d) 209 (N. Y., 1936).

*New Rochelle Water Co. v. Maltbie*, 248 App. Div. 66, 289 N. Y. Supp. 388, 397, 15 P. U. R. (N. S.) 32 (3d Dept. 1936).

**Pennsylvania.**

*City of Erie v. Public Service Commission*, 123 Atl. 471, P. U. R. 1924D, 89 (Pa. 1924).

"Time has usually wiped out much of the evidence to show original cost. The records then kept did not account for all the various items entering into it, nor do the books of today, though kept with meticulous care, exactly cover such items. As stated by Mr. Justice Brandeis in his concurrence in the *Southwestern Bell Case*, wherein the present value method is assailed in what may be termed the last word on the subject:

" 'Ordinarily, stocks and bonds did not indicate the amount of capital embarked in the enterprise. Depreciation accounts were unknown, and * * * book values or property accounts furnished no trustworthy evidence either of cost or of real value.'

"It is here that a part of the difficulty is met, if original cost were adopted as the rule of value. * * *." (p. 475)

*Borough of Verona v. Suburban Water Company*, P. U. R. 1920F, 942 (Pa. P. S. C., 1920).

"Original cost, one of the elements to be considered by the Commission in determining fair value, is the actual cost of the property. Historical cost may be defined to be the cost ascertained by applying to the property of the company the prices prevailing at the time the plant was constructed or property acquired. It is only ascertained when original cost is not available. Historical cost, therefore, may be more or less than original cost and neither should be confused with fair value, as they are only elements ascertainable in the manner indicated, to be considered by the Commission in reaching its determination. The cost submitted to the Commission in this case was original cost, so far as it was obtainable from the books of the company, and where original cost could not be obtained it was supplemented

by historical cost. It is, therefore, a combination of the two. Book value is that which is placed upon the property of the company for accounting purposes. It may be the same or more or less than original or historical cost." (p. 945)

*Re Philadelphia Rapid Transit Company*, 26 P. U. R. (N. S.) 65, 105 (Pa. P. U. C., 1938).

**Wisconsin.**

*Re City of Milwaukee*, P. U. R. 1927B, 229, 244 (Wis. R. R. C., 1926).

## APPENDIX C.

**Analysis of Cases Cited in Commission's Brief (Pages 79-82) Said to "Prohibit Reaccounting and Support the Principles Employed by the Commission" in Determining "Original Cost."**

The only three federal cases cited on this point in the Commission's brief not merely for comparison ("Cf.") are the decision of the Supreme Court in the *Natural Gas Pipeline* case, the decision of the District Court in the *Los Angeles Gas & Electric* case, and the decision of the Circuit Court of Appeals for the Ninth Circuit in the *Northwestern Electric* case. As to these three cases we note the following:

1. *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575. Here the rate base actually used by the Commission was the reproduction cost new of all of the utility's physical properties, plus the present value of its gas reserves, its estimated capital additions, and working capital (315 U. S., 586-587). The discussion at page 590, specifically referred to in the Commission's brief, deals with the claim for $8,500,000 for going concern value as a separate allowance. There was no exclusion from the rate base in this case of any part of the cost or value of any items of physical property by reason of the past accounting practices of the utility. In excluding a separate allowance for going concern value, the Court pointed out that the only items excluded were "expenditures for securing new business" and costs of carrying "non-productive capacity" (315 U. S., 588).

2. *Los Angeles Gas & Electric Corp. v. Railroad Commission*, 58 F. (2d) 256, (D. Ct., S. D. Calif. 1932). This is the case that ultimately reached the Supreme Court in *Los Angeles Gas & Electric Corp. v. Railroad Commission of California*, 289 U. S. 287. The rate base found non-confiscatory by the Supreme Court was one of $65,500,000,

undepreciated, "on the basis of fair value." This was almost $5,000,000 in excess of historical cost (289 U. S., 310). The views of the California Commission and the District Court as to whether overheads in excess of those actually capitalized should under the particular circumstances of that case be included in the historical cost, the Supreme Court did not pass upon, pointing out that even if the $2,000,000 claimed by the utility had been added to the historical cost allowed by the Commission the result would still be substantially below the Commission's "fair value" rate base (289 U. S., 309-310).

The decision of the District Court that there should not be included in historical cost larger overheads than the utility had capitalized was based upon the principles of estoppel. In the initial valuation proceeding for this company in 1917, *Los Angeles Gas & Electric Corp.*, P. U. R. 1917 F, 717 (1917), the California Commission capitalized and included in the rate base overheads at approximately the 24.27% claimed by the company fifteen years later in the rate proceeding which finally reached the Supreme Court (P. U. R. 1931A, 132 (1930); P. U. R. 1933E, 317 (1933)). Thus, to use its own language, the Commission apprised the company that it could capitalize overheads at a substantial figure, even though part of them had been carried as operating expenses. The company, however, rejected the Commission's suggestion, and continued to capitalize overheads at slightly less than 6%, charging the balance to operating expenses. In this manner the company over a period of some fifteen years after the initial valuation and *in a succession of almost biennial rate hearings obtained increased rates on the basis of the operating expenses shown by its books, including the overheads* which the Commission had originally suggested that it might capitalize. Thus the company was actually *allowed* increased rates to take care of the enhanced operating expenses due to the overhead items it later sought to capitalize.

3. *Northwestern Electric Co. v. Federal Power Commission*, 125 F. (2d) 882 (C. C. A. 9th, 1942). This is a pure accounting case. The Federal Power Commission had ordered the utility not to place certain interest during construction in its capital accounts on its books, and the court held that the Commission was within its jurisdiction in requiring it so to account. The court was careful to point out (at p. 886) that "the system of accounts takes nothing from petitioner."

The two federal cases marked "Cf." in the Commission's brief are not relevant. *Helvering v. Wilshire Oil Company*, 308 U. S. 90, at pages 95, 97, was an income tax case in which the taxpayer sought both to deduct development costs from gross revenues in order to determine taxable net income and not to deduct them for the purpose of computing the depletion allowances. *Chicago & N. W. R. Co. v. Commissioner*, 114 F. (2d) 882, 886 (C. C. A. 7th, 1940), was also an income tax case, involving the right of the taxpayer to shift from the retirement to the straight line method of computing depreciation without complying with relevant regulations.

As to the two state court cases cited we note the following:

1. *Peoples Gas Light & Coke Company v. Slattery*, 373 Ill. 31, 25 N. E. (2d) 482, 493 (1940), app. dism. 309 U. S. 634, was a case in which the commission and court approved a rate base of $120,000,000 as against the historical cost (undepreciated) of the property as claimed by the company of $111,000,000. The case furthermore involves the application of the principle of estoppel since the utility had long been under regulation and had obtained higher rates by reason of the increased operating expenses due to the inclusion of the overheads which the company sought to capitalize.

2. *Natural Gas Company of West Virginia v. Public Service Commission*, 95 W. Va. 557, 121 S. E. 716 (1924). In this case the court disapproved the inclusion in the rate base of overheads and well drilling costs formerly charged to operations by means of which the company had obtained higher rates from the state commission. The court expressly approved the fair value rule for the fixing of a rate base and remanded the case to the Commission for its failure to give proper consideration to reproduction cost. In order to test the company's claim of confiscation, the court reconstructed a hypothetical rate base in which it added 52% to the historical cost of the company's property to determine its current fair value. The company claimed an allowance of 18% for overheads which the court found was not supported by the facts; but the court directed the commission on remand to make proper allowance for overhead costs.

In addition to the foregoing federal and state court cases the Commission's brief cites decisions by various commissions. Only three of these are by federal commissions. Two are the Federal Power Commission's own decisions. The *Canadian River Gas* case (43 P. U. R. (N. S.) 205 (1942)) is a rate case decided by the Commission shortly before the *Hope* case, and it applied exactly the same theories being tested here, but to a new property. The *Northwestern Electric* case (36 P. U. R. (N. S.) 202 (1940)), reviewed by the Circuit Court of Appeals in the opinion previously discussed, is a case involving the Commission's application to purely accounting problems of its own interpretation of its system of accounts.

In addition the decision of the Interstate Commerce Commission in the *Elgin, Joliet & Eastern Railway Company* case is cited (84 I. C. C. 587 (1924)). What this case actually holds is that capital costs formerly charged to operating expenses, when properly identifiable, should be transferred to capital account for the purpose of determin-

ing the actual original cost of a railroad property. As we noted in Appendix B at pages 166 to 168 above the Interstate Commerce Commission has uniformly taken this position and as the oldest federal regulatory body its interpretation of what is meant by the term "original cost" is of controlling significance.

The balance of the cases cited in the Commission's brief are all State commission cases which fall into one or more of the following general classes:

**1. Cases where the rate base fixed was present fair value, substantially in excess of the depreciated original or historical cost of the property.**

*California:*

*San Francisco v. Pacific Gas & E. Co.*, P. U. R. 1918A, 506 (1917) also cited in classes 2 and 4.

*District of Columbia:*

*Re Potomac Electric Power Co.*, P. U. R. 1917D, 563 (1917) also cited in class 2.

*Hawaii:*

*Re Hawaiian Electric Co. Ltd.*, 33 P. U. R. (N. S.) 161 (1940).

*Illinois:*

*Illinois Commerce Comm. v. Pub. Serv. Co.*, 4 P. U. R. (N. S.) 1 (1934) also cited in class 2.

*Illinois Commerce Commission v. Commonwealth Edison Co.*, 15 P. U. R. (N. S.) 404 (1936) also cited in class 2.

*Indiana:*

*Re Indianapolis Water Co.*, P. U. R. 1919A, 448 (1918).

*Michigan:*

*Re Eaton Rapids*, P. U. R. 1922D, 94 (1922).

*Missouri:*

*Re West St. Louis Water & Light Co.*, P. U. R. 1922E, 805 (1922) also cited in class 3.

*Aluminum Goods Mfg. Co. v. Laclede Gas Light Co.*, P. U. R. 1927B, 1 (1926) also cited in class 4.

*New York:*

*Re Brooklyn Borough Gas Co.*, 21 P. U. R. (N. S.) 353 (1937) also cited in classes 2 and 3.

*Herman v. Newtown Gas Co.*, P. U. R. 1916D, 825 (1916).

*Maires v. Flatbush Gas Co.*, P. U. R. 1920E, 930 (1918) also cited in class 2.

*Moritz v. Edison Electric Illum. Co.*, P. U. R. 1917A, 364 (1916) also cited in class 2.

*Pennsylvania:*

*Public Utility Comm. v. Duquesne Light Co.*, 20 P. U. R. (N. S.) 1 (1937).

*West Virginia:*

*Re Clarksburg Light & Heat Co.*, P. U. R. 1928B, 290 (1927) also cited in class 2.

*Re West Virginia Central Gas Co.*, P. U. R. 1924E, 24.

*Re West Virginia Central Gas Co.*, P. U. R. 1918C, 453 also cited in class 3.

*Re Clarksburg Light & Heat Co.*, P. U. R. 1917A, 577 (1916) also cited in class 4.

*Wisconsin:*

*Re Reedsburg Telephone Company*, 7 P. U. R. (N. S.) 389 (1934).

**2. Estoppel cases where the circumstances were similar to those in the Los Angeles case.**

*California:*

*San Francisco v. Pacific Gas & E. Co.*, P. U. R. 1918A, 506 (1917) (Municipal Regulation) also cited in classes 1 and 4.

*Re Los Angeles Gas & Electric Corp.*, P. U. R. 1931A, 132 (1930) (Commission decision under review in *Los Angeles* case above. Commission included interest during construction not previously capitalized).

*Re Los Angeles Gas & Electric Corp.*, P. U. R. 1933E, 317 (1933) (Accounting case).

*District of Columbia:*

*Re Potomac Electric Power Co.*, P. U. R. 1917D, 563 (1917) (Congressional Regulation) also cited in class 1.

*Illinois:*

*Illinois Commerce Comm. v. Pub. Serv. Comm.*, 4 P. U. R. (N. S.) 1 (1934) also cited in class 1.

*Illinois Commerce Comm. v. Commonwealth Edison Co.*, 15 P. U. R. (N. S.) 404 (1936) also cited in class 1.

*New York:*

*Moritz v. Edison Electric Illum. Co.*, P. U. R. 1917A, 364 (1917) also cited in class 1.

*Mairs v. Flatbush Gas Co.*, P. U. R. 1920E, 930 (1918) also cited in class 1.

*Re New York State Railways*, P. U. R. 1922B, 75 (1921).

*Re Westchester Lighting Company*, 15 P. U. R. (N. S.) 299 (1936).

*Re Brooklyn Borough Gas Co.*, 21 P. U. R. (N. S.) 353 (1937) also cited in classes 1 and 3.

*Pennsylvania:*

*Public Utility Com. v. Peoples Natural Gas Co.*, 43 P. U. R. (N. S.) 82 (1942).

*West Virginia:*

*Re Clarksburg Light & Heat Co.*, P. U. R. 1928B, 290 (1927). (Where well drilling costs were being charged to expense, Commission said they "should not be included in the present valuation of its property, *provided the same policy of accounting is continued*," p. 297) also cited in class 1.

*Wisconsin:*

*Re Mondovi Telephone Co.*, P. U. R. 1933B, 319 (1932); P. U. R. 1933D, 142 (1932).

**3. Cases where the items excluded from the rate base comprised for the most part intangible overheads and not direct property costs and the claims for such overheads were wholly unsupported by the facts:**

*Missouri:*

*Re West St. Louis Water & Light Co.*, P. U. R. 1922E, 805 (1922) (Contractor's fee) also cited in class 1.

*New York:*

*Re Brooklyn Borough Gas Co.*, 21 P. U. R. (N. S.) 353 (1937) also cited in classes 1 and 2.

*West Virginia:*

*Re West Virginia Central Gas Co.*, P. U. R. 1918C, 453 (1918) (20%) also cited in class 1.

**4. Cases where the items excluded from the rate base were not proper capital costs but were regarded as current operating expenses:**

*California:*

*San Francisco v. Pacific Gas & E. Co.*, P. U. R. 1918A, 506 (1917) (expense involved in location of street lamps) also cited in classes 1 and 2.

*Colorado:*

*Re Leadville Water Co.*, P. U. R. 1921D, 172 (1921).

*Idaho:*

*Re Kootenai Power Co.*, P. U. R. 1924E, 831 (1924) (Donations, advertising, etc.).

*Missouri:*

*Aluminum Goods Mfg. Co. v. Laclede Gas Light Co.*, P. U. R. 1927B, 1 (1926) (Cost of records) also cited in class 1.

*Montana:*

*Public Service Commission v. Montana Petroleum Company*, P. U. R. 1924B, 364 (1923).

*West Virginia:*

*Re Clarksburg Light & Heat Co.*, P. U. R. 1917A, 577 (1916) (Drilling costs excluded because treated as operating expenses by Commission for future) also cited in class 1.

The only case cited by the Commission which is not included in any of the foregoing categories is *Re Central Maine Power Co.*, P. U. R. 1918C, 792 (1918), which was not a rate case at all but involved simply the authorization of the issuance of securities.

As a matter of fact, many of the cases cited by the Commission expressly permit the inclusion of overheads not previously carried in capital account or expressly approve the inclusion in the rate base of property purchased from income, including the following cases:

*California:*

*San Francisco v. Pacific Gas & E. Co.*, P. U. R. 1918A, 506 (1917) (10% for overheads; see also page 519).

*Michigan:*

*Re Eaton Rapids*, P. U. R. 1922D, 94 (1922) ($31,000 acquired from profits as against $185,000 rate base).

*Missouri:*

*Aluminum Goods Manufacturing Company v. Laclede Gas Light Co.*, P. U. R. 1927B, 1 (1926) (15% for overheads and also donated property included).

*Montana:*

*Public Service Commission v. Montana Petroleum Company*, P. U. R. 1924B, 364 (1923) (20% for overheads).

*West Virginia:*

*Re West Virginia Central Gas Co.*, P. U. R. 1918C, 453 (1918).

*Re West Virginia Central Gas Co.*, P. U. R. 1924E, 24 (1924).

# APPENDIX D.

## HOPE NATURAL GAS COMPANY

### "Direct Costs of Production of Gas (Exclusive of Return) and Increment of Direct Costs Year 1940 Over 1939."

*[Copy of Table 12 of Cleveland Reply Brief before the Commission (p. 104)]*

| | Exhibit 67, 1939 | Exhibit 78, 1940 | Increment Costs—1940 over 1939 |
|---|---|---|---|
| Expenses of Producing Gas, Excl. of eciation and Depletion (Ex. 67, pp. 17, Ex. 78, pp. 17, 23) | | | |
| 4.1 Gas Well Labor | $ 330,338.52 | $ 347,147.21 | |
| 5.1 Gas Well Supplies and Expenses | 150,999.56 | 164,662.01 | |
| 1 Maint. of Prod. Gas Well Equip. | 53,457.92 | 83,242.02 | |
| 5 Gas Well Royalties | 828,851.62 | 885,841.27 | |
| Total Direct Gas Well Expenses | 1,343,647.62 | 1,480,892.51 | |
| ross Production Tax | 144,633.15 | 221,908.58 | |
| Total, Incl. Production Tax | 1,488,280.77 | 1,702,801.09 | |
| eciation and Depletion (Ex. 78, p. 54) | | | |
| perated Acreage | $ 36,772.47 | $ 57,084.00 | |
| as Well Construction | 182,755.43 | 286,492.00 | |
| ost of Abandoning | 69,813.58 | 105,860.00 | |
| Total Depletion | 289,341.48 | 449,436.00 | |
| epreciation of Gas Well Equipment (Ex. 61, p. 24; Ex. 78, p. 26) | 188,482.85 | 186,702.97 | |
| Total Depreciation and Depletion | $ 447,824.33 | $ 636,138.97 | |
| Volume of Gas Produced—M.c.f. (Ex. 78, p. 54) | 16,546,230 | 26,800,000 | 10,253,770 |
| et Expenses per M.c.f. Produced | | | |
| 34.1 Gas Well Labor | 2.00¢ | 1.29¢ | |
| 35.1 Gas Well Supplies and Expenses | .79 | .61 | |
| 41 Maint. of Prod. Gas Well Equip. | .32 | .31 | |
| 45 Gas Well Royalties | 5.01 | 3.31 | |
| Total Direct Gas Well Expenses | 8.12 | 5.52 | |
| Gross Production Tax | .87 | .83 | |
| Total, Incl. Production Tax | 8.99¢ | 6.35¢ | |
| reciation and Depletion per M.c.f. Pro ced: | | | |
| Depletion | 1.75¢ | 1.68¢ | |
| Depreciation of Gas Well Equipment | 1.14 | .70 | |
| Total Depreciation and Depletion | 2.89¢ | 2.38¢ | |
| al Direct Costs of Producing Gas, Incl. epreciation and Depletion: | | | |
| Amount | $1,966,105.10 | $2,338,940.06 | $372,834.96 |
| Per M.c.f. Produced | 11.88¢ | 8.73¢ | 3.64¢ |

# APPENDIX E.

## HOPE NATURAL GAS COMPANY.

### Indicated Rate Reduction Based on Findings of the Commission for the Year 1940 and Reported Changes in Plant, Revenues, and Expenses to December 31, 1942.

### (Excluding former Reserve Gas Company Operations)

| | 1940 per Commission Findings (R. I, 12) | Increase on Commission's Method | 1942 | Less former Reserve Gas Company (Ex. 77) | 1942 excluding former Reserve Gas Company |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Operating Revenues from Interstate Sales | $19,296,755 | $5,933,028 | $25,229,783 | $1,210,973 | $24,018,810 |
| Operating Deductions: | | | | | |
| Operating Expenses except Federal Income Tax | 12,997,845 | 4,452,813 | 17,450,658 | 716,942 | 16,733,716 |
| Federal Income Tax | 912,313 | 1,627,704 | 2,540,017 | 71,207 | 2,468,810 |
| Total | $13,910,158 | $6,080,517 | $19,990,675 | $ 788,149 | $19,202,526 |
| Net Operating Revenues from Interstate Sales | 5,386,597 | (147,489) | 5,239,108 | 422,824 | 4,816,284 |
| Return at 6½% | 2,088,756 | 231,976 | 2,320,732 | (Note A) | 2,320,732 |
| Excess Earnings before Income Tax Saving | 3,297,841 | (379,465) | 2,918,376 | — | 2,495,552 |
| Income Tax Savings | 912,313 | 1,033,271 | 1,945,584 | — | 1,663,701 |
| Total Indicated Rate Reduction | $ 4,210,154 | $ 653,806 | $ 4,863,960 | — | $ 4,159,253 |

NOTE A: No adjustment of the 1942 return computed by the Commission's brief is made since there is no way of determining what if any amount is included therein on account of the Reserve Gas Company's properties. The $3,377,171 net addition to the average 1938-1939 rate base used by the Commission's brief in computing the return would include at the most the very low net book cost of the Reserve properties, a 6½% return on which would be less than $150,000.

( ) Parentheses denote losses.

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# In the Supreme Court of the United States

## OCTOBER TERM, 1943.

FEDERAL POWER COMMISSION, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONERS,

vs.

HOPE NATURAL GAS COMPANY.

**No. 34**

CITY OF CLEVELAND,

*Petitioner,*

vs.

HOPE NATURAL GAS COMPANY,

*Respondent.*

**No. 35**

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT.

## HOPE NATURAL GAS COMPANY.

## SCHEDULES FROM BRIEFS AND EXHIBITS.

WILLIAM B. COCKLEY,

*Attorney for Hope Natural Gas Company.*

October 20, 1943.

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO—MAIN 5647

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**SCHEDULE I**

## HOPE NATURAL GAS COMPANY

### Annual Gas Sales—M.c.f.

| | 1937 | 1938 | 1939 | 1940* |
|---|---|---|---|---|
| Total Local Sales of Gas in West Virginia | 11,428,353 | 8,632,673 | 9,732,983 | 11,320,325 |
| Export Gas Sales: | | | | |
| To East Ohio | 35,074,416 | 30,316,773 | 33,907,672 | 40,376,091 |
| To Peoples | 3,506,013 | 2,870,545 | 3,864,104 | 9,738,612 |
| To River | 330,644 | 222,615 | 237,640 | 391,859 |
| To Fayette | 849,305 | 837,986 | 840,398 | 859,106 |
| To Manufacturers | 4,523,967 | 3,995,563 | 2,500,755 | 2,241,684 |
| Total Export Gas Sales | 44,284,345 | 38,243,482 | 41,350,569 | 53,607,352 |
| Total Gas Sales | 55,712,698 | 46,876,155 | 51,083,552 | 64,927,677 |

* Excluding per stipulation (Ex. 77) sales from former Reserve Gas Company properties merged with Hope on December 30, 1939.

*(From Hope Brief, p. 4)*

SCHEDULE II

## HOPE NATURAL GAS COMPANY

**Comparison of Net Returns from Interstate Business, 1937-1940, Based on Hope's and Commission Staff's Claims as to Operating Expenses**

| | Hope | Commission Staff |
|---|---|---|
| 1937 | $2,587,901 | $3,244,904 |
| 1938 | 730,529 | 1,186,435 |
| 1939 | 2,174,361 | 3,020,246 |
| 1940 | 4,574,804 | 5,576,982 |
| 3-Year Average—1937 to 1939 | 1,830,930 | 2,483,862 |
| 4-Year Average—1937 to 1940 | 2,516,899 | 3,257,142 |

*(From Hope Brief, p. 116; Hope figures from Ex. 133, p. 1)*

**Net Returns from Interstate Business on Commission Basis if Rates Fixed by It for the Future Had Been in Effect in the Years 1937 to 1939**

| | Net Interstate Operating Income |
|---|---|
| 1937 | $ 708,653 |
| 1938 | (1,394,164) Loss |
| 1939 | 333,502 |
| 3-Year Average | $ (117,336) Loss |

*(From Hope Brief, p. 123)*

**SCHEDULE III**

## HOPE NATURAL GAS COMPANY

### Rate Bases Found by the Commission

| | December 31, 1938 | December 31, 1940 |
|---|---|---|
| | (1) | (2) |
| "Gross Investment in Gas Plant in Service" (including all leaseholds) | $51,792,000 | $52,523,000 |
| Less: "Actual Existing Depletion and Depreciation" | 21,188,000 | 22,328,000 |
| "Net Investment" | $30,604,000 | $30,195,000 |
| Add: "Working Capital" | 2,100,000 | 2,125,000 |
| "Interstate Rate Base" | $32,704,000 | $32,320,000 |
| Add: "Net Capital Additions, 1941, 1942, 1943" | | 1,392,000 |
| Total Future Rate Base | | $33,712,000 |

*(From Hope Brief, p. 28; also Opinion, R. I, p. 50)*

SCHEDULE IV

## HOPE NATURAL GAS COMPANY

**Original Cost—Difference Between Hope's Evidence and Commission's Findings as of December 31, 1938**

| | | |
|---|---|---|
| Hope's Evidence as to Original Cost | | $69,735,000 |
| Commission's Adjusted Book Cost | | 51,792,000 |
| Difference | | $17,943,000 |
| This difference is due to the omission from the Commission's Adjusted Book Cost of the following principal classes of items: | | |
| Drilling and other direct well construction costs for 2633 wells | $12,643,641 | |
| Other direct material and labor costs of buildings, pipe lines and other miscellaneous property | 1,380,154 | |
| Field and general overheads, including interest during construction | 3,825,126 | |
| | $17,848,921 | |

*(From Hope Brief, pp. 28-29, 33)*

SCHEDULE V

## HOPE NATURAL GAS COMPANY

### "The Leasehold Costs of Natural Gas Produced

| | Method of Handling The Exploration And Development Costs | |
|---|---|---|
| | Industry Practice Of Charging To Expense | Capitalization Method Used in This Exhibit |
| | (1) | (2) |
| **"Depreciated Costs as of December 31, 1938 for Inclusion in Rate Base** | | |
| Operated acreage—acquisition cost | $ 482,311 | $ 482,311 |
| Net remainder of accumulated exploration and development costs | — | 5,331,236 |
| Unoperated acreage—acquisition cost | 681,882 | — |
| Total for rate base | $1,164,193 | $5,813,547 |
| **"Average 1937, 1938 and 1939 Exploration and Development Costs** | | |
| Delay rentals | $ 450,981 | $ — |
| Loss on unoperated leases cancelled | 49,543 | — |
| Non-productive drilling costs | 53,037 | — |
| Depletion of operated acreage @ 4.77 per cent | 23,006 | 23,006 |
| Depletion of exploration and development costs @ 4.77 per cent | — | 254,300 |
| Return on rate base at 8 per cent | 93,135 | 465,084 |
| Total | $ 669,702 | $ 742,390" |
| With return on rate base at 6½ per cent the total figures become | $ 652,240 | $ 655,187 |

*(Copy of Table on p. 11 of Rhodes' Ex. 26; "The Leasehold Costs of Natural Gas Produced," with last line from Hope Brief, footnote p. 45)*

SCHEDULE VI

## HOPE NATURAL GAS COMPANY

### Original Cost and Original Cost Trended to 1938 Prices of Hope's Production, Transmission and General Properties Existing at December 31, 1938

| Year First Placed in Public Service | Original Cost | Original Cost Trended To 1938 Prices |
|---|---|---|
| (1) | (2) | (3) |
| 1891 | $ 9,732 | $ 30,400 |
| 1892 | 203,822 | 487,857 |
| 1893 | 52,126 | 135,566 |
| 1894 | 74,419 | 192,547 |
| 1895 | 68,264 | 194,183 |
| 1896 | 26,292 | 81,773 |
| 1897 | 41,064 | 129,073 |
| 1898 | 40,043 | 100,865 |
| 1899 | 239,067 | 477,298 |
| 1900 | 177,521 | 424,916 |
| 1901 | 118,241 | 274,326 |
| 1902 | 1,229,574 | 2,228,121 |
| 1903 | 1,823,280 | 3,363,441 |
| 1904 | 2,088,446 | 4,252,002 |
| 1905 | 1,008,070 | 2,569,486 |
| 1906 | 440,829 | 977,413 |
| 1907 | 1,588,829 | 2,990,262 |
| 1908 | 796,342 | 1,578,711 |
| 1909 | 1,146,626 | 2,522,741 |
| 1910 | 2,150,919 | 4,532,162 |
| 1911 | 2,632,698 | 5,291,264 |
| 1912 | 1,429,618 | 3,213,789 |
| 1913 | 2,640,408 | 5,729,962 |
| 1914 | 1,691,034 | 3,787,696 |
| 1915 | 1,285,027 | 2,838,853 |
| 1916 | 2,247,279 | 4,046,968 |
| Total 1891-1916 | $25,249,550 | $52,451,675 |
| 1917 | 3,090,157 | 4,634,837 |
| 1918 | 2,732,017 | 3,554,480 |
| 1919 | 3,103,006 | 3,851,272 |
| 1920 | 2,507,985 | 2,759,541 |
| 1921 | 3,195,259 | 3,887,959 |
| 1922 | 1,031,019 | 1,458,934 |
| 1923 | 2,334,062 | 2,967,252 |
| 1924 | 3,065,508 | 3,559,552 |
| 1925 | 7,231,827 | 8,306,766 |
| 1926 | 2,484,197 | 2,752,025 |
| 1927 | 2,040,911 | 2,274,092 |
| 1928 | 1,155,524 | 1,325,453 |
| 1929 | 1,734,331 | 1,897,881 |
| 1930 | 1,395,355 | 1,641,396 |

| | (1) | (2) | (3) |
|---|---|---|---|
| | 1891 | $ 9,732 | $ 30,400 |
| | 1892 | 203,822 | 487,857 |
| | 1893 | 52,126 | 135,566 |
| | 1894 | 74,419 | 192,547 |
| | 1895 | 68,264 | 194,183 |
| | 1896 | 26,292 | 81,773 |
| | 1897 | 41,064 | 129,073 |
| | 1898 | 40,043 | 100,865 |
| | 1899 | 239,067 | 477,298 |
| | 1900 | 177,521 | 424,916 |
| | 1901 | 118,241 | 274,326 |
| | 1902 | 1,229,574 | 2,228,121 |
| | 1903 | 1,828,260 | 3,363,441 |
| | 1904 | 2,088,446 | 4,252,002 |
| | 1905 | 1,008,070 | 2,569,486 |
| | 1906 | 440,829 | 977,413 |
| | 1907 | 1,588,829 | 2,990,262 |
| | 1908 | 796,342 | 1,578,711 |
| | 1909 | 1,146,626 | 2,522,741 |
| | 1910 | 2,150,919 | 4,532,162 |
| | 1911 | 2,632,698 | 5,291,264 |
| | 1912 | 1,429,618 | 3,213,789 |
| | 1913 | 2,640,408 | 5,729,962 |
| | 1914 | 1,691,034 | 3,787,696 |
| | 1915 | 1,285,027 | 2,838,853 |
| | 1916 | 2,247,279 | 4,046,968 |
| **Total** | **1891-1916** | **$25,249,550** | **$52,451,675** |
| | 1917 | 3,090,157 | 4,634,837 |
| | 1918 | 2,732,017 | 3,554,480 |
| | 1919 | 3,103,006 | 3,851,272 |
| | 1920 | 2,507,985 | 2,759,541 |
| | 1921 | 3,195,259 | 3,887,959 |
| | 1922 | 1,031,019 | 1,458,934 |
| | 1923 | 2,334,062 | 2,967,252 |
| | 1924 | 3,065,508 | 3,559,552 |
| | 1925 | 7,231,827 | 8,306,766 |
| | 1926 | 2,484,197 | 2,752,025 |
| | 1927 | 2,040,911 | 2,274,092 |
| | 1928 | 1,155,524 | 1,325,453 |
| | 1929 | 1,734,331 | 1,897,881 |
| | 1930 | 1,395,355 | 1,641,396 |
| | 1931 | 471,244 | 553,393 |
| | 1932 | 226,955 | 274,415 |
| | 1933 | 186,770 | 225,114 |
| | 1934 | 2,390,535 | 2,629,544 |
| | 1935 | 338,156 | 363,565 |
| | 1936 | 2,591,508 | 2,847,117 |
| | 1937 | 1,136,838 | 1,163,238 |
| | 1938 | 860,725 | 860,725 |
| **Total** | **1917-1938** | **$45,303,889** | **$ 53,788,551** |
| **Total** | **1891-1938** | **$70,553,439** | **$106,240,226** |
| Less: Coke Oven Gas Property | | 817,801 | 1,138,314 |
| **Total** | | **$69,735,638** | **$105,101,912** |

*(From Ex. 20, R. I, p. 207, with subtotals added, and property used to transport coke oven gas deducted per Ex. 20, R. I, p. 193)*

**SCHEDULE VII**

## HOPE NATURAL GAS COMPANY

**Summary of Evidence of Interstate Rate Base—Before Depreciation**
**As of December 31, 1938**

*(Exclusive of Working Capital and Capital Additions)*

| | |
|---|---|
| **Hope Evidence** | |
| 1. Book Cost | $ 52,730,000 |
| 2. Original Cost | 69,735,000 |
| 3. Original Cost at 1917-1938 prices | 90,000,000 |
| 4. Original Cost Trended to 1938 prices | 105,101,000 |
| 5. Reproduction Cost New: | |
| (a) Ohio Commission—6/30/37 | 100,257,000 |
| (b) Hope—12/31/38 | 97,340,000 |
| **Commission Staff Evidence** | |
| Staff's Adjusted Book Cost | $ 51,792,000 |

*(From Hope Brief, p. 29)*

SCHEDULE VIII

## HOPE NATURAL GAS COMPANY

### Investors' Appraisal of Capital Risk in Various Divisions of the Utility Business

| | 1937 | 1938 | 1939 | 1940 | Four Year Average 1937-1940 |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Electric Utility Operating Companies | 5.47% | 5.50% | 5.41% | 5.34% | 5.45% |
| Water Companies | 5.52 | 5.39 | 5.66 | 5.23 | 5.45 |
| Manufactured and Mixed Gas Companies | 6.17 | 6.61 | 6.61 | 6.88 | 6.57 |
| Natural Gas Companies | 7.91 | 7.79 | 7.53 | 7.97 | 7.80 |
| Natural Gas Companies excluding Pacific Lighting Corporation | 8.32 | 8.05 | 8.32 | 9.34 | 8.51 |

*(From Hope Brief, footnote, p. 107)*

**SCHEDULE IX**

## HOPE NATURAL GAS COMPANY

### Hope's Interstate Rate Base for Future Rates Using California Method of an Undepreciated Rate Base

a) **Using Commission's Adjusted Book Cost as Original Cost:**

| | |
|---|---|
| Physical Properties and Operated Leaseholds | $51,957,416 |
| Useful Unoperated Leaseholds | 566,105 |
| Working Capital | 2,125,000 |
| Net Capital Additions | 1,392,021 |
| Total | $56,040,542 |

b) **Using Hope's Determination of Original Cost:**

| | |
|---|---|
| Original Cost* | $70,593,000 |
| Working Capital | 2,125,000 |
| Net Capital Additions | 1,392,000 |
| Total | $74,110,000 |

**Commission's Allowances in Future Rates:**

| | |
|---|---|
| For Return | $ 2,191,314 |
| For Depreciation and Depletion | $ 1,460,037 |
| Total | $ 3,651,351 |

* Hope's original cost of physical properties and leaseholds as of December 31, 1938 plus 1939 and 1940 net additions as found by the Commission (R. I, 36).

*(From Hope Brief, pp. 114, 113)*

**SCHEDULE X**

## HOPE NATURAL GAS COMPANY

### "Direct Costs of Production of Gas (Exclusive of Return) and Increment of Direct Costs Year 1940 Over 1939."

*[Copy of Table 12 of Cleveland Reply Brief before the Commission (p. 104)]*

| | Exhibit 67, 1939 | Exhibit 78, 1940 | Increment Costs—1940 over 1939 |
|---|---|---|---|
| "Direct Expenses of Producing Gas, Excl. of Depreciation and Depletion (Ex. 67, pp. 17, 39; Ex. 78, pp. 17, 23) | | | |
| 734.1 Gas Well Labor | $ 330,338.52 | $ 347,147.21 | |
| 735.1 Gas Well Supplies and Expenses | 130,999.56 | 164,662.01 | |
| 741 Maint. of Prod. Gas Well Equip. | 53,457.92 | 83,242.02 | |
| 745 Gas Well Royalties | 828,851.62 | 885,841.27 | |
| Total Direct Gas Well Expenses | 1,343,647.62 | 1,480,892.51 | |
| Gross Production Tax | 144,633.15 | 221,908.58 | |
| Total, Incl. Production Tax | 1,488,280.77 | 1,702,801.09 | |
| "Depreciation and Depletion (Ex. 78, p. 54) | | | |
| Operated Acreage | $ 36,772.47 | $ 57,084.00 | |
| Gas Well Construction | 182,755.43 | 286,492.00 | |
| Cost of Abandoning | 69,813.58 | 105,860.00 | |
| Total Depletion | 289,341.48 | 449,436.00 | |
| Depreciation of Gas Well Equipment (Ex. 61, p. 21; Ex. 78, p. 26) | 188,482.85 | 186,702.97 | |
| Total Depreciation and Depletion | $ 477,824.33 | $ 636,138.97 | |
| Volume of Gas Produced—M.c.f. (Ex. 78, p. 54) | 16,546,230 | 26,800,000 | 10,253,770 |
| "Direct Expenses per M.c.f. Produced | | | |
| 734.1 Gas Well Labor | 2.00¢ | 1.29¢ | |
| 735.1 Gas Well Supplies and Expenses | .79 | .61 | |
| 741 Maint. of Prod. Gas Well Equip. | .32 | .31 | |
| 745 Gas Well Royalties | 5.01 | 3.31 | |
| Total Direct Gas Well Expenses | 8.12 | 5.52 | |
| Gross Production Tax | .87 | .83 | |
| Total, Incl. Production Tax | 8.99¢ | 6.35¢ | |
| "Depreciation and Depletion per M.c.f. Produced: | | | |
| Depletion | 1.75¢ | 1.68¢ | |
| Depreciation of Gas Well Equipment | 1.14 | .70 | |
| Total Depreciation and Depletion | 2.89¢ | 2.38¢ | |
| "Total Direct Costs of Producing Gas, Incl. Depreciation and Depletion: | | | |
| Amount | $1,966,105.10 | $2,338,940.06 | $372,834.96 |
| Per M.c.f. Produced | 11.88¢ | 8.73¢ | 3.64¢" |

*(Copy of Appendix D, Hope Brief, p. 183)*

**SCHEDULE XI**

## HOPE NATURAL GAS COMPANY

**Subnormality of Hope's Costs in 1940 as Shown by the Commission's Findings**

| | 1939 | 1940 | Increase 1940 over 1939 |
|---|---|---|---|
| | (1) | (2) | (3) |
| 1. "Revenues from Interstate Sales .. | $14,866,894 | $19,296,755" | $4,429,861 |
| 2. "Operating Deductions [Expenses] | 11,845,649 | 12,997,845" | 1,152,196 |
| 3. "Net Operating Income from Interstate Sales ..... | $ 3,021,245 | $ 6,298,910" | $3,277,665 |
| 4. "Interstate Sales in M.c.f. ..... | 41,350,569 | 53,604,243" | 12,253,674 |

5. Increase in operating expenses, $1,152,196 ÷ Increase in M.c.f. sales, 12,253,674 = 9¢ per M.c.f.

*(From Hope Brief, p. 119; also lines 1, 2 and 3 quoted from Commission's "Findings as to Lawfulness of Past Rates," R. 1, p. 12, and line 4 from its Opinion, R. 1, p. 40)*

SCHEDULE XII

# HOPE NATURAL GAS COMPANY

## Fixed Assets, Total Sales and Revenue, Depreciation and Net Operating Gas Income per Books 1926-1940

| Year | Fixed Assets Per Books* | Hope's Total Sales Per Books | | Depreciation and Depletion Per Books | Hope Net Operating Gas Income Per Books | Total Col. (5) + (6) |
|---|---|---|---|---|---|---|
| | | M.c.f. | Revenue | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | | (Thousands Omitted) | | | |
| 1926 | $ 47,164 | 57,156 | $ 20,662 | $ 2,872 | $ 3,479 | $ 6,351 |
| 1927 | 48,762 | 52,433 | 19,363 | 2,809 | 1,535 | 4,344 |
| 1928 | 48,548 | 55,081 | 20,635 | 2,651 | 2,393 | 5,044 |
| 1929 | 52,193 | 57,444 | 22,048 | 2,660 | 3,234 | 5,894 |
| 1930 | 53,009 | 52,649 | 19,931 | 2,677 | 1,188 | 3,865 |
| 1931 | 52,779 | 47,725 | 17,993 | 2,560 | 699 | 3,259 |
| 1932 | 52,412 | 37,702 | 14,206 | 2,329 | (805) Loss | 1,524 |
| 1933 | 52,191 | 37,080 | 14,121 | 1,998 | 366 | 2,364 |
| 1934 | 54,454 | 43,535 | 15,986 | 1,693 | 1,041 | 2,734 |
| 1935 | 54,312 | 47,133 | 16,976 | 1,846 | 2,279 | 4,125 |
| 1936 | 56,106 | 55,679 | 20,139 | 2,013 | 3,555 | 5,568 |
| 1937 | 58,536 | 58,911 | 20,366 | 1,982 | 2,368 | 4,350 |
| 1938 | 56,650 | 47,921 | 16,942 | 1,663 | 872 | 2,535 |
| 1939 | 64,251 | 51,344 | 18,119 | 1,218 | 2,283 | 3,501 |
| 1940 | 65,193 | 69,056 | 24,362 | 1,464 | 5,337 | 6,801 |
| Total | $814,560 | 770,849 | $281,849 | $32,435 | $29,824 | $62,259 |
| Average | $ 54,304 | 51,390 | $ 18,790 | $ 2,162 | $ 1,988 | $ 4,150 |

*Fixed Assets for 1939 and 1940 include former Reserve Gas Company properties merged with Hope on December 30, 1939. Other columns include operations of former Reserve Gas Company for 1940 only.

*(From Hope Brief, p. 12)*

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# In the Supreme Court of the United States

OCTOBER TERM, 1942.

No. 35

CITY OF CLEVELAND,
*Petitioner,*

v.

HOPE NATURAL GAS COMPANY,
*Respondent.*

## PETITION FOR A WRIT OF CERTIORARI
To the United States Circuit Court of Appeals
For the Fourth Circuit.

THOMAS A. BURKE, JR.,
*Director of Law,*

SPENCER W. REEDER,
*Special Assistant Director of Law,*

ROBERT E. MAY,
*Solicitors for City of Cleveland, Petitioner.*

THE GATES LEGAL PUBLISHING CO., CLEVELAND, OHIO—MAIN 5647

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# In the Supreme Court of the United States

**OCTOBER TERM, 1942.**

## No. 891.

CITY OF CLEVELAND,
*Petitioner,*

v.

HOPE NATURAL GAS COMPANY,
*Respondent.*

## PETITION FOR A WRIT OF CERTIORARI

**To the United States Circuit Court of Appeals For the Fourth Circuit.**

The Director of Law on behalf of the City of Cleveland, Ohio respectfully prays that a writ of certiorari issue to review the judgment of the United States Circuit Court of Appeals for the Fourth Circuit, entered in the case of *Hope Natural Gas Company v. Federal Power Commission, City of Cleveland, City of Akron, and Pennsylvania Public Utility Commission* on February 16, 1943, setting aside the Federal Power Commission's "Order Reducing Rates" of the respondent, Hope Natural Gas Company, and setting aside the Federal Power Commission's "Findings as to Lawfulness of Past Rates," charged by respondent.

### OPINIONS BELOW.

The opinion of the Circuit Court of Appeals is not yet officially reported, but may be found at R.[1] IV, pp. 169-207. The opinion of the Federal Power Commission is found at R. I, pp. 1-89.

[1] In the record citations, roman numerals refer to the volume, arabic numerals to the page.

## JURISDICTION.

The judgment of the Circuit Court of Appeals was entered on February 16, 1943 (R. IV, p. 207). The jurisdiction of this Court is invoked under Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925, and Section 19(b) of the Natural Gas Act.

## STATUTE INVOLVED.

The pertinent provisions of the Natural Gas Act of 1938 (52 Stat. 821; 15 U. S. C. § 717 *et seq.*) are set forth in Appendix A, *infra*, pp. 22-24.

## QUESTIONS PRESENTED.

The Federal Power Commission, after complaints by Cleveland, Akron, and the Pennsylvania Public Utility Commission and after extensive hearings, found that Hope's interstate rates were unreasonable and unlawful and issued an order reducing Hope's future rates $3,609,857 annually. The Commission also determined the lawful rate for sales to Hope's affiliate, East Ohio, for a period subsequent to the passage of the Natural Gas Act and prior to the Commission's order fixing future rates. The Commission adopted a prudent investment rate base. The Circuit Court invoked the "present fair value" theory to set aside the Commission's findings and order. The questions presented are:

1. Whether, for rate-making purposes under the Natural Gas Act, the Commission is authorized to use a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less depreciation, or whether it must use a rate base which reflects estimates of the extent and effect of post-investment fluctuations in labor and material prices.

2. Whether the Commission must include in actual legitimate cost amounts previously and correctly

charged to operating expenses, in accordance with industry practice of the time, and determined by the Commission to have been recouped through revenues from the rate payers.

3. Whether the lower court erred in holding that in determining the actual existing or accrued depletion and depreciation, the Commission failed to take into account "the present condition of the property."

4. Whether the Commission may determine actual existing or accrued depletion and depreciation, and the annual allowance in operating expenses for these factors, upon the basis of actual legitimate cost, or whether the Commission must base such determinations upon estimates of "present fair value" of the property.

5. Whether the economic-service-life principle, as applied by the Commission in this case, is a reasonable method of determining the actual existing depletion and depreciation and the annual allowance therefor.

6. Whether the lower court erred in holding that $165,965 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 operating expenses.

7. Whether the rates fixed by the Commission are just and reasonable in the statutory sense and nonconfiscatory in the constitutional sense.

8. Whether the Commission has jurisdiction to determine the *lawful* rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order.

9. Whether the lower court erred in holding that the Commission's "findings as to past rates * * * should be set aside."

## STATEMENT.

### The Respondent.

Hope Natural Gas Company, a wholly-owned subsidiary of the Standard Oil Company (New Jersey), is conceded to be a "natural-gas company" within the meaning of the Natural Gas Act (R. III, p. 19). Hope purchases and produces natural gas in West Virginia, transports it in pipe lines to the West Virginia-Ohio and West Virginia-Pennsylvania state lines, and there sells it in interstate commerce to its affiliates, East Ohio Gas Company and River Gas Company, for resale to ultimate consumers in Ohio, to its affiliate, Peoples Natural Gas Company, for resale to ultimate consumers in Pennsylvania, and to the non-affiliated Manufacturers Light and Heat Company and Fayette County Gas Company for resale in Pennsylvania. About 85% of Hope's total sales are in interstate commerce and 95% of such sales are to its aforementioned affiliates. About 15% of Hope's total volume of gas is sold in intrastate commerce to local consumers in West Virginia (R. I, p. 18). Hope has been purchasing, producing, transporting and selling natural gas for more than forty years. Hope's interstate sales in 1940 amounted to about 53,000,000 M.c.f. and its interstate gross revenues in that year amounted to $19,296,000 (R. I, p. 51).

### The Statute.

The Natural Gas Act (the "Act"), effective June 21, 1938, requires that all rates or charges in connection with the transportation or sale of natural gas subject to the Act must be just and reasonable and declares any rate or charge that is not just and reasonable to be unlawful (Sec. 4(a)). It provides that the Federal Power Commission (the "Commission"), upon complaint of any State, municipality, State Commission, or gas distributing company, or upon its own motion, whenever it finds that any rate is unjust or unreasonable, shall determine the rate to be

thereafter observed and in force, and shall fix the same by order; and, further, that the Commission "may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates" (Sec. 5(a)).

Any State, municipality, or State commission, complaining of anything done or omitted to be done by any natural gas company in contravention of the provisions of the Act may file a complaint with the Commission (Sec. 13). Under Section 14(a) the Commission may investigate "to determine whether any person has violated or is about to violate any provision of this act," and Section 16 empowers it to perform any and all acts as it may find necessary or appropriate to carry out the provisions of the Act. The Commission is required by Section 17(c) to make available to the several State Commissions "such information and reports as may be of assistance in State regulation of natural gas companies."

**The Proceedings Before the Commission.**

In July, 1938, the Cities of Cleveland and Akron filed complaints with the Federal Power Commission, charging that the rate collected by Hope from East Ohio was excessive and unreasonable (R. II, pp. 1, 7). Cleveland's complaint, filed two weeks after the Natural Gas Act became effective, was the first complaint received by the Commission under the Act. In October, 1938, the Commission, on its own motion, instituted an investigation to determine the reasonableness of all of Hope's interstate rates (R. II, p. 28). In March, 1939, the Pennsylvania Public Utility Commission filed a complaint with the Federal Power Commission, charging that the rates collected by Hope from Peoples Natural Gas Company, Manufacturers Light and Heat Company, and Fayette County Gas Company were unreasonable. (R. II, p. 18). The City of Cleveland's complaint, as amended and modified, prayed spe-

cially for a determination by the Commission that Hope's collected rate from East Ohio was unreasonable and therefore unlawful, and for a determination of just and reasonable Hope-East Ohio rates from June 30, 1939 to the date of the Federal Power Commission's decision, requesting such determinations "in aid of State regulation" and particularly to afford The Public Utilities Commission of Ohio a proper basis for disposition of a fund collected by East Ohio under bond from Cleveland consumers during the period since June 30, 1939 (R. II, p. 14). The City of Cleveland represented to the Federal Power Commission that, in a pending proceeding before The Public Utilities Commission of Ohio, Hope's distributing affiliate, East Ohio, sought to use the rate paid to Hope under the initial schedule filed by Hope with the Federal Power Commission, to support a claim that an ordinance rate of the municipality, suspended by the filing of a bond, should be permanently set aside, and that higher rates should be imposed upon the ultimate consumers of gas in the municipality. In October, 1939, the Federal Power Commission consolidated the three complaint cases and its own investigation of Hope's interstate wholesale rates for hearing (R. II, p. 34). On December 20, 1940, the Commission denied without prejudice a motion of the Cities of Cleveland and Akron for an immediate order reducing the Hope-East Ohio rate upon the Hope Company's own testimony, upon the ground that "there is insufficient evidence of record, at this time, to support the prayer for relief requested by movants," and subject to the reservation that "this order is not to be construed as a determination of any of the issues in the pending principal proceedings" (R. II, p. 43). Hearings were held in 1940 and 1941, and after briefs were filed, the case was argued orally before the Commission sitting *en banc* on October 27, 1941 (R. II, p. 48). The Commission decided the case on May 26, 1942 (R. I, pp. 1, 8) when it entered an "Order Reducing Rates" charged by Hope and in addition, separate

"Findings as to Lawfulness of Past Rates" collected by Hope from East Ohio.

**The Commission's Determinations.**

The Commission's "Order Reducing Rates" required Hope to reduce its interstate rates for the future to reflect a reduction of not less than $3,609,857 in operating revenues on an annual basis (R. I, p. 6). More particularly, the order required minimum reductions of 7 cents per M.c.f. from the 36.5 cent and 35.5 cent rates previously charged East Ohio and Peoples, respectively, and 3 cents per M.c.f. from the 31.5 cent rate previously charged Fayette County and Manufacturers Light and Heat (R. I, pp. 73-74). The Commission's "Findings as to Lawfulness of Past Rates," made in deciding the complaint of the City of Cleveland, determined that the rates collected by Hope from East Ohio were unjust, unreasonable, excessive, and therefore unlawful, by $830,892 in 1939, $3,219,551 during 1940 and $2,815,789 on an annual basis since 1940; it further determined just, reasonable and lawful rates for gas sold to East Ohio for resale for ultimate public consumption to be $11,528,608 for 1939, $11,507,185 for 1940 and $11,910,947 on an annual basis for 1941 and the first half of 1942 (R. I, pp. 12-13).

The Commission founded its "Order Reducing Rates" upon a rate base of $33,712,526, upon which it granted respondent a 6½% rate of return (R. I, p. 4), or $2,191,314, annually. The rate base was determined to be the actual legitimate cost of, or gross investment in, Hope's interstate property less existing depletion and depreciation, plus allowances for unoperated acreage, working capital and future net capital additions (R. I, p. 50).

The Commission's rate base was arrived at substantially as follows: The Commission found that Hope had kept complete documentary evidence, through books, records and vouchers, of its expenditures throughout its existence, so that no estimates were required to ascertain the

actual legitimate cost (R. I, pp. 23, 174). Pursuant to a check of the inventory of Hope's property in service and examination, analysis and audit of respondent's records, the Commission determined the cost to be $52,174,873 for the property devoted to the interstate sales, as of December 31, 1940 (R. I, p. 36). From this amount, the Commission then deducted accrued depletion and depreciation, which it found to be $22,328,016 (R. I, pp. 45-50). It arrived at this figure by applying the economic-service-life method to actual legitimate cost (R. I, p. 41). In making these determinations the Commission was guided by a study conducted by a qualified staff engineer, who made a field inspection of the Company's physical properties to aid in the determination of service lives (R. I, p. 42). The actual existing depletion and depreciation found by the Commission came to about $24,000,000 less than the depletion and depreciation which the Company had accrued on its books (R. I, p. 81). One of the Commissioners dissented on the ground that the Commission should have deducted accrued depreciation and depletion of not less than $38,000,000, the reserve remaining on the Company's books after it had transferred $7,500,000 from the reserve to surplus (R. I, p. 81). The Commission then added $1,392,021 for future net capital additions, $566,105 for useful unoperated acreage and $2,125,000 for working capital, yielding the total rate base of $33,712,526 (R. I, p. 50).

Using 1940 as a test year to forecast future revenues, and forecasting expenses at the 1940 figure plus $421,160, the Commission allowed respondent operating expenses and taxes amounting to $13,495,584 (R. I, pp. 62, 70, 72). Of this total $1,460,037 represented the annual allowance for depreciation and depletion (R. I, p. 53). This allowance was determined by the Commission in the same way as the actual existing depreciation and depletion, by the application of the economic-service-life method to the actual legitimate cost of respondent's properties (R. I, pp. 51-52).

The Commission's "Findings as to Lawfulness of Past Rates" were arrived at on the same principles and in substantially the same manner as the "Order Reducing Rates," except that they were based on actual operating experience for the years in question, instead of a test year (R. I, p. 11).

In issuing its order and findings the Commission rejected respondent's argument that post-investment changes in price levels had to be reflected in the rate base and in computing both accrued depreciation and depletion and the annual allowance in operating expenses for depreciation and depletion (R. I, pp. 20-23, 36, 41, 52). It condemned as hypothetical and without probative value the "reproduction cost new" and "trended original cost" estimates (amounting to approximately $97,000,000 and $105,000,000 respectively) submitted in evidence by respondent in support of its claimed rate base of some $66,000,000 (R. I, pp. 20-23). The Commission also rejected respondent's contention that, in any event, the rate base should have reflected an additional sum of about $17,000,000, representing largely expenditures for well-drilling prior to 1923, which respondent had charged to operating expense (R. I, pp. 24-34). Likewise unsuccessful were respondent's espousal of the "percent condition" theory of measuring accrued depreciation (R. I, p. 38), its claim that an expenditure of $165,965 for a deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 operating expenses, and its argument that the annual allowance for depletion and depreciation should take account of the capital additions recognized after 1940.

Pursuant to Section 19 of the Act, Hope filed an application for rehearing (R. II, p. 51), and upon denial, petitioned the United States Circuit Court of Appeals for the Fourth Circuit for a review of the Commission's "Order Reducing Rates" and the Commission's "Findings as to Lawfulness of Past Rates," naming the Federal Power Commission, the City of Cleveland, the City of Akron, and the Pennsylvania Public Utility Commission as parties

respondent (R. IV, p. 1). Hope did not seek a stay of the Commission's order from the Court of Appeals and such order has not been stayed; instead Hope agreed with its customer companies to charge the ordered rates pending litigation, upon the customers' agreement to make Hope whole if the Commission's order should be finally invalidated.

**The Opinion Below.**

On review, the court below, with one judge dissenting, set aside the Commission's "Order Reducing Rates" on the basic grounds that: (1) the Commission's use of a prudent investment rate base failed to reflect "present fair value," in view of the post-investment, "decided change in price levels" shown by the record and judicially noticeable (R. IV, pp. 172, 184); (2) the Commission erroneously excluded from the rate base the well-drilling costs charged to operating expenses prior to 1928 (R. IV, pp. 172, 184-189); (3) the Commission improperly determined accrued depreciation on the basis of "mere formulas," without considering the present physical condition of respondent's property (R. IV, pp. 172, 190); (4) the Commission should have based its annual allowance in operating expenses for depreciation and depletion upon the "present fair value" of the physical property, instead of upon actual legitimate cost (R. IV, pp. 194-196); (5) the Commission should have included in 1940 operating expenses $165,965 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941 (R. IV, p. 198); (6) the Commission should have made an annual allowance for depreciation and depletion on capital added to the rate base after 1940 (R. IV, p. 198).

The Court also set aside the Commission's "Findings as to Lawfulness of Past Rates," holding (1) that the Commission had no jurisdiction to make findings as to lawfulness of past rates "to be given effect in rate proceedings

before state commissions," and that rates filed with the Commission under Section 4 (e) of the Act became the only "lawful" ones which the utility could charge or accept until changed by the Commission; (2) that the Commission could investigate "the conditions and rates of the past" as an incident of its power to fix future rates, but that so viewed the findings in question were invalid for the same reasons as its "Order Reducing Rates," and were also objectionable in that they were based on actual experience for the years in question, rather than reasonable estimates of expenses based on experience during a prior period (R. IV, p. 203). The Court further held that if the Commission has jurisdiction to determine lawful rates for a period subsequent to the passage of the Natural Gas Act and prior to the making of an order fixing future rates, its determination is, in effect, an order of the Commission affecting substantial rights and contractual relationships of a party to a proceeding before it and is reviewable as such (R. IV, p. 203). On March 8, 1943, the Circuit Court granted a motion for the stay of its mandate pending further order, upon the condition that a petition for writ of certiorari be filed with the Supreme Court of the United States within thirty days.

## REASONS FOR GRANTING THE WRIT.

1. The public interest will be promoted by the prompt settlement in this Court of the questions involved.

The issue which is stirred by the main questions presented in this case is whether the Federal Power Commission under the Natural Gas Act may adopt the prudent investment method of rate-making.

The right of the Federal Power Commission to adopt the prudent investment method of rate-making under the Natural Gas Act is a matter of great importance to the Federal Power Commission in the administration of the Act; to States, municipalities, and State commissions, which are authorized by the Act to petition the Federal

Power Commission; to natural gas companies subject to the Act; and to the ultimate consumers of natural gas throughout the Nation, for whose benefit the Act was passed.

Several years ago the importance of a formal recognition by this Court of the freedom of an administrative body to adopt the prudent investment method of rate-making was urged in the concurring opinion of Mr. Justice Frankfurter, with whom Mr. Justice Black joined, in *Driscoll v. Edison Light and Power Company*, 307 U. S. 104, 122-123 (1939), as follows:

> "The decree below was clearly wrong. But in reversing it, the Court's opinion appears to give new vitality needlessly to the mischievous formula for fixing utility rates in *Smyth v. Ames*, 169 U. S. 466. The force of reason, confirmed by events, has gradually been rendering that formula moribund by revealing it to be useless as a guide for adjudication. Experience has made it overwhelmingly clear that *Smyth v. Ames* and the uses to which it has been put represented an attempt to erect temporary facts into legal absolutes. The determination of utility rates—what may fairly be exacted from the public and what is adequate to enlist enterprise—does not present questions of an essentially legal nature in the sense that legal education and lawyers' learning afford peculiar competence for their adjustment. These are matters for the application of whatever knowledge economics and finance may bring to the practicalities of business enterprise. The only relevant function of law in dealing with this intersection of government and enterprise is to secure observance of those procedural safeguards in the exercise of legislative powers which are the historic foundations of due process.
>
> "Mr. Justice Bradley nearly fifty years ago made it clear that the real issue is whether courts or commissions and legislatures are the ultimate arbiters of utility rates (dissenting, in *Chicago, M. & St. P. Ry. Co. v. Minnesota*, 134 U. S. 418, 461). Whatever may be thought of the wisdom of a broader judicial role

in the controversies between public utilities and the public, there can be no doubt that the tendency, for a time at least, to draw fixed rules of law out of *Smyth v. Ames* has met the rebuff of facts. At least one important state has for decades gone on its way unmindful of *Smyth v. Ames*, and other states have by various proposals sought to escape the fog into which speculations based on *Smyth v. Ames* have enveloped the practical task of administering systems of utility regulation.

"*Smyth v. Ames* should certainly not be invoked when it is not necessary to do so. The statute under which the present case arose represents an effort to escape *Smyth v. Ames* at least as to temporary rates. It is the result of a conscientious and informed endeavor to meet difficulties engendered by legal doctrines which have been widely rejected by the great weight of economic opinion (See 2 *Bonbright, The Valuation of Property*, 1081-1086, 1094-1102; 3A *Sharfman, The Interstate Commerce Commission*, 121-137) by authoritative legislative investigations (N. Y. State Commission on Revision of the Public Service Commission Law, *Report of Commissioners, passim* (1930)), by utility commissions throughout the country, (Proceedings of the Forty-Seventh Annual Convention of the National Association of Railroad and Utilities Commissioners, 232 *et seq.*; Proceedings of the Forty-Eighth Annual Convention of the National Association of Railroad and Utilities Commissioners, 115 *et seq.*, 289 *et seq.*; Proceedings of the Forty-Ninth Annual Convention of the National Association of Railroad and Utilities Commissioners, 159 *et seq.*) and by impressive judicial dissents. (See, e.g., Brandeis, *J.*, concurring, in *Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Comm'n*, 262 U. S. 276, 289 and bibliography therein contained.)"

More recently, Justices Black, Douglas, and Murphy, concurring in *Federal Power Commission v. Natural Gas Pipeline Company of America*, 315 U. S. 575, 606 (1942), flatly stated that the Federal Power Commission under the Natural Gas Act may adopt prudent investment as a rate base, in the following explicit language:

"As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value.' The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the *Southwestern Bell Telephone* case, there could be no constitutional objection if the Commission adhered to that formula and rejected all others."

Judge Dobie of the United States Circuit Court of Appeals for the Fourth Circuit, dissenting below, interprets the opinions in *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575 (1942), *supra*, as authorizing the Commission to adopt a prudent investment rate base, as follows (R. IV, pp. 203-205):

"The Commission, in arriving at the proper rate-base, frankly and openly adopted the Prudent Investment Theory and paid no attention to the present value of the properties of Hope. Mr. Justice Brandeis, in his classic concurring opinion (Mr. Justice Holmes joined in the opinion) in *State of Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri*, 262 U. S. 276, has set forth, with his customary incisive clarity, the Prudent Investment Theory, together with the reasons for his belief in that theory. To my mind, the arguments he therein advances have never been convincingly refuted.

"Nearly twenty years have slipped by since that opinion was handed down. During this period, the pronouncements of the United States Supreme Court in this field have been many, varied and quite confusing. This fact has been pointed out by writers whose names are thrice legion. The recent case (involving the Natural Gas Act, with which we are also concerned) of *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. 575, however, does call for some comment.

"The majority opinion in that case (written by Chief Justice Stone) contains no express discussion of

the Prudent Investment Theory and certainly does not in precise terms sanction the use of that theory alone. Interesting, though, in this connection is the oft-quoted statement of Chief Justice Stone (315 U. S. at page 586):

> "'The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. If the Commission's order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end.'

But the concurring opinion of Justices Black, Douglas and Murphy, on the specific point under discussion, is as clear as crystal and as crisp as bacon; for this opinion flatly and squarely upholds the validity of the application of the Prudent Investment Theory, to the exclusion of any other theory (315 U. S. at page 606) in three sentences so free from ambiguity that they cannot be misunderstood:

> "'As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or giving any weight to that element of fair "value." The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the *Southwestern Bell Telephone* case, there *could be no constitutional objection if the Commission adhered to that formula and rejected all others.*' (Italics ours.)

It is difficult for me to believe that the majority of the Supreme Court, believing otherwise, would leave such a statement unchallenged.

"A careful study of the Natural Gas Act (particularly the precise wording of Section 6) convinces me that Congress intended to give to the Federal Power Commission a wider latitude and a more extended discretion than had been given to any other federal board or commission under any previous statute in the field of rate making.

"Further, I think that the methods adopted by the Commission under the Prudent Investment Theory, in arriving at a rate-base in the instant case, were neither fanciful nor arbitrary. It seems to me, too, that there was substantial evidence to support the opposite findings of the Commission.

"Accordingly, I see here no adequate reasons for reversing on this score the decision and findings of the Commission."

In short, the prudent investment issue is important to the Federal Power Commission, States, municipalities, State commissions, natural gas companies, and ultimate consumers of natural gas. A dissenting opinion in the Court below interprets the decision of this Court in the *Natural Gas Pipeline Company Case* as authorizing the Commission to adopt a prudent investment rate base. Four of the Justices of this Court have rendered opinions urging that the public interest will be promoted by the prompt settlement of the prudent investment issue. There has been a change in the personnel of this Court since the *Natural Gas Pipeline* decision was rendered.

The first reason for granting the writ, therefore, is that the public interest will be promoted by the prompt settlement in this Court of the issue as to whether the Federal Power Commission under the Natural Gas Act may adopt the prudent investment method of rate-making.

2. The holding of the Court below that the Federal Power Commission has no jurisdiction to determine upon complaint of a municipality and upon its own investigation that a natural gas company has violated the Natural Gas Act Section 4(a) by charging an unjust, unreasonable and

therefore unlawful initial rate, and to determine the lawful rate for a period after the passage of the Natural Gas Act and prior to a Commission order fixing future rates, decides a federal question in a way probably in conflict with applicable decisions of this Court.

This question is of substantial importance to petitioner, the City of Cleveland, because the Federal Power Commission's "Findings as to Lawfulness of Past Rates," if valid, furnish an appropriate basis for refunds to Cleveland consumers of temporary rates collected under bond by respondent's affiliate, The East Ohio Gas Company, in pending proceedings before The Public Utilities Commission of Ohio (*East Ohio Gas Company v. City of Cleveland*, P. U. C. O. Nos. 11,001, 11,218, 11,442), of $3,600,000 or an average of about $13 per customer from June 30, 1939 to June 30, 1942.

Conversely, the holding of the Court below that initial filed rates of a natural gas company are the only lawful rates until changed by a future rate-fixing order of the Federal Power Commission, unless reviewed by this Court, would become *res judicata* between Cleveland and The East Ohio Gas Company as a privy of Hope, cf. *Sunshine Coal Company v. Adkins*, 310 U. S. 381, 389-391, 401-404 (1940) and in that event, the $3,600,000 would inure to the benefit of the Standard Oil Company (New Jersey), which is the sole owner of both Hope and East Ohio.

In holding that initial-filed schedule rates of a natural gas company are the only lawful rates until changed by a future rate-fixing order of the Federal Power Commission, the Court below has decided a federal question, to wit, the interpretation of a federal statute. More particularly, the lower Court has misinterpreted Section 4(a) of the Natural Gas Act, which provides that all rates and charges made by any natural gas company for or in connection with the sale of natural gas shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful. It has misinterpreted

Section 13 of the Natural Gas Act, which provides that any municipality complaining of anything done or omitted to be done by any natural gas company in contravention of the provisions of the Act may file a complaint with the Commission. It has misinterpreted Section 14(a) of the Natural Gas Act, which provides that the Commission may investigate to determine whether any person has violated any provision of this Act. It has misinterpreted Section 16 which empowers the Commission to perform any and all acts as it may find necessary or appropriate to carry out the provisions of the Act. And it has misinterpreted Section 17(c), which requires the Federal Power Commission to make available to the several State commissions such information and reports as may be of assistance in State regulation of natural gas companies.

The holding of the Court below that the Federal Power Commission has no jurisdiction to determine lawful rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of the Commission rate-fixing order, upon the ground that initial filed rates of a natural gas company are the only lawful rates until changed by a future rate-fixing order of the Federal Power Commission, is in conflict with applicable decisions of this Court.

First, the holding of the Court below is in conflict with the decision of this Court in *United States v. Morgan*, 307 U. S. 183, 191-193 (1939) (Mr. Justice Stone) where the Court said:

> "Assuming, as appellees contend, that after the Secretary's order of June, 1933, was set aside he could, in the reopened proceeding, neither promulgate a rate order as of that date nor make an order for the payment of money, he was still not without authority in the premises under the statute and the mandate of this Court. He was free to make an order fixing rates for the future, and for that purpose or any other within the purview of the Act he is now free to determine a reasonable rate for the period antedating any order he may now make. See *Atlantic Coast Line R. Co. v.*

*Florida*, 295 U. S. 301, 312. No prior decision of the Secretary stands in the way of his making the determination now. Cf. *Arizona Grocery Co. v. Atchison, T. & S. F. Ry. Co.*, 284 U. S. 370. The sole limitation upon his power, prescribed by sec. 309 (e), is that upon an inquiry instituted by him he may not order the payment of money. In other respects his power to investigate and decide is unaffected.[3] He may make inquiry 'as to any matter or thing concerning which a complaint is authorized to be made' to him, 'or concerning which any question may arise under any of the provisions' of the Act, 'or relating to the enforcement of any' provision. He is given 'the same power and authority to proceed with any inquiry instituted upon his own motion as though he had been appealed to by petition, including the power to make and enforce any order or orders in the case or relating to the matter or thing concerning which the inquiry is had, except orders for the payment of money.' Sec. 309(e).

"That the Secretary, acting under sec. 309(a), could now entertain a complaint by the patrons of appellees who have contributed to the fund in court charging that the rates exacted were in violation of sec. 305, seems to be conceded as is, we think, plain. Section 309(a) specifically provides: 'If * * * there appears to be any reasonable ground for investigating the complaint, it shall be the duty of the Secretary to investigate the matters complained of in such manner and by such means as he deems proper.' It seems equally plain that under sec. 309 (e) the Secretary, in the exercise of his discretion, may conduct such an investigation on his own motion. Ordinarily, it is true, there would be no occasion for such an investigation if, as a result of it, the Secretary could make no reparation order. But, as we shall presently point out, when the alleged excessive rates are *in custodia legis*, the court has authority and is under an equitable duty to dispose of them according to law and justice. Thus the Secretary has the best of reasons to exercise his power to determine whether the rates were reasonable and may rightly do so, if his determination can afford a proper basis for the action of the district court in making disposition of the fund."

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[3] Sec. 309(e): [Copy of this section set forth in margin of Court's opinion will be found in Appendix B, *infra*, p. 25].

Second, the holding of the Court below is in conflict with the decision of this Court in *Atlantic Coast Line Railroad Company v. Florida*, 295 U. S. 301, 312 (1935) (Mr. Justice Cardozo), where the Court said:

> "* * * Unjust discrimination against interstate commerce, 'forbidden' by the statute, and there 'declared to be unlawful,' (Interstate Commerce Act, sec. 13(4); *Board of Railroad Commissioners v. Great Northern Ry. Co., supra*, at pp. 425, 430; *Florida v. United States*, 292 U. S. 1, 5) does not lose its unjust quality because the evil is without a remedy until the Commission shall have spoken. The word when it goes forth invested with the forms of law may fix the consequences to be attributed to the conduct of the carrier in reliance upon an earlier word, defectively pronounced, but aimed at the self-same evil, there from the beginning. The Commission was without power to give reparation for the injustice of the past, but it was not without power to inquire whether injustice had been done and to make report accordingly. * * *"

Third, the holding of the Court below is in conflict with applicable decisions of this Court because it overlooks the distinction between a legal and a lawful rate, enunciated by Mr. Justice Roberts in *Arizona Grocery v. Atchison Railway*, 284 U. S. 370 (1932), where the Court said at page 384:

> "* * * In order to render rates definite and certain, and to prevent discrimination and other abuses, the statute required the filing and publishing of tariffs specifying the rates adopted by the carrier, and made these the *legal* rates, that is, those which must be charged to all shippers alike. (*Id.*, sec. 6. *Kansas City Southern Ry. Co. v. Carl*, 227 U. S. 639, 653; *Pennsylvania R. Co. v. International Coal Co.*, 230 U. S. 184, 197; *Louisville & N. R. Co. v. Maxwell*, 237 U. S. 94, 97; *Dayton C. & I. Co. v. Cincinnati, N. O. & T. P. Ry. Co.*, 239 U. S. 446, 450. Any deviation from the published rate was declared a criminal offense, and also a civil wrong giving rise to an action for damages by the injured shipper. (Id. secs. 8, 9, 10.) Although the Act thus created a legal rate, it did not abrogate, but ex-

pressly affirmed, the common-law duty to charge no more than a reasonable rate, and left upon the carrier the burden of conforming its charges to that standard. (Id. sec. 1.) In other words, the legal rate was not made by the statute a lawful rate—it was lawful only if it was reasonable. * * *"

The second reason for granting the writ is that the holding of the Court below that the Federal Power Commission has no jurisdiction to determine the lawful rate for interstate gas for a period after the passage of the Natural Gas Act and prior to a Commission order fixing future rates, decides a federal question in a way probably in conflict with applicable decisions of this Court.

## CONCLUSION.

Since the public interest will be promoted by the prompt settlement in this Court of the issue as to whether the Federal Power Commission under the Natural Gas Act may employ the prudent investment method of rate-making, and

Since the holding of the Court below, that the Federal Power Commission has no jurisdiction to determine the lawful rate for interstate gas for a period after the passage of the Natural Gas Act and prior to a Commission order fixing future rates, decides a federal question in a way probably in conflict with applicable decisions of this Court,

Therefore, it is respectfully submitted that the petition for a writ of certiorari should be granted.

THOMAS A. BURKE, JR.,
*Director of Law,*

SPENCER W. REEDER,
*Special Assistant Director of Law,*

ROBERT E. MAY,
*Solicitors for City of Cleveland,*
*Petitioner.*

## APPENDIX A.

Applicable sections of The Natural Gas Act of 1938, C. 556, 52 Stat. 833; 15 U. S. C. Supp. V, Secs. 717-717w, provide:

Sec. 4.(a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.

Sec. 5.(a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any state, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however*, That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

Sec. 13. Any State, municipality, or State commission complaining of anything done or omitted to be done by any natural-gas company in contravention of the provisions of this act may apply to the Commission by petition, which shall briefly state the facts, whereupon a statement of the complaint thus made

shall be forwarded by the Commission to such natural-gas company, which shall be called upon to satisfy the complaint or to answer the same in writing within a reasonable time to be specified by the Commission.

Sec. 14.(a) The Commission may investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person has violated or is about to violate any provision of this act or any rule, regulation, or order thereunder, or to aid in the enforcement of the provisions of this act or in prescribing rules or regulations thereunder, or in obtaining information to serve as a basis for recommending further legislation to the Congress. The Commission may permit any person to file with it a statement in writing, under oath or otherwise, as it shall determine, as to any or all facts and circumstances concerning a matter which may be the subject of investigation. The Commission, in its discretion, may publish in the manner authorized by section 312 of the Federal Power Act, and make available to State commissions and municipalities, information concerning any such matter.

Sec. 16. The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this act. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this act; and may prescribe the form or forms of all statements, declarations, applications, and reports to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or mat-

ters. All rules and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours.

Sec. 17.(c) The Commission shall make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies. Whenever the Commission can do so without prejudice to the efficient and proper conduct of its affairs, it may, upon request from a State commission, make available to such State commission as witnesses any of its trained rate, valuation, or other experts, subject to reimbursement of the compensation and traveling expenses of such witnesses. All sums collected hereunder shall be credited to the appropriation from which the amounts were expended in carrying out the provisions of this subsection.

Sec. 6.(a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction.

## APPENDIX B.

Section 309 (c) of Packers and Stockyards Act:

§ 309 (c) "The Secretary may at any time institute an inquiry on his own motion, in any case and as to any matter or thing concerning which a complaint is authorized to be made to or before the Secretary, by any provision of this title, or concerning which any question may arise under any of the provisions of this title, or relating to the enforcement of any of the provisions of this title. The Secretary shall have the same power and authority to proceed with any inquiry instituted upon his own motion as though he had been appealed to by petition, including the power to make and enforce any order or orders in the case or relating to the matter or thing concerning which the inquiry is had, except orders for the payment of money."

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CLERK

# In the Supreme Court of the United States

**OCTOBER TERM, 1943.**

## No. 35.

CITY OF CLEVELAND,
*Petitioner,*

v.

HOPE NATURAL GAS COMPANY,
*Respondent.*

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT.

## BRIEF OF PETITIONER.

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# In the Supreme Court of the United States

**OCTOBER TERM, 1943.**

## No. 35.

CITY OF CLEVELAND,
*Petitioner,*

v.

HOPE NATURAL GAS COMPANY,
*Respondent.*

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT.

## BRIEF OF PETITIONER.

This case is here on writ of certiorari, which this Court allowed on May 17, 1943 to review a judgment in favor of the Hope Natural Gas Company entered by the United States Circuit Court of Appeals for the Fourth Circuit—it is true, by a divided vote of its members[1]—setting aside the Federal Power Commission's "Order Reducing Rates" and "Findings as to Lawfulness of Past Rates," which were made in a consolidated proceeding under the Natural Gas Act of 1938, wherein the City of Cleveland, the City of Akron, and the Pennsylvania Public Utility Commission, were complainants, and the Federal Power Commission had made an investigation upon its own motion.

The City of Cleveland, petitioner, is especially interested in this review of the judgment of the divided court below, for the reason that the Federal Power Commission's

[1] John J. Parker, Senior Circuit Judge; Morris A. Soper, U. S. Circuit Judge; A. M. Dobie, U. S. Circuit Judge, dissenting. (IV R. 207.)

"Order Reducing Rates" and "Findings as to Lawfulness of Past Rates," if valid, constitute an appropriate basis for refunds to the ultimate consumers of natural gas in Cleveland of temporary rates collected under bond by respondent's affiliate, The East Ohio Gas Company[2] in presently pending proceedings before The Public Utilities Commission of Ohio[3] of over $5,000,000 or an average of about $20 per customer from June 30, 1939 to June 30, 1943.

## OPINIONS BELOW.

The opinion of the Circuit Court of Appeals (Parker, Senior Circuit Judge, and Soper, Circuit Judge), together with the dissenting opinion of Dobie, Circuit Judge (IV R. 169-207), is officially reported in 134 F. (2d) 287.

The opinion of the Federal Power Commission (I R. 1-89) is reported in 44 P. U. R. (N. S.) 1.

## JURISDICTION.

The judgment of the Circuit Court of Appeals was entered on February 16, 1943. (IV R. 207.)

The jurisdiction of this Court is invoked under Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925 (28 U. S. C. Secs. 346 and 347), and as made applicable by Section 19(b) of the Natural Gas Act of 1938. (52 Stat. 831; 15 U. S. C. Sec. 717r(b).)

This Court granted certiorari on May 17, 1943. (*City of Cleveland v. Hope Natural Gas Company*, ... U. S. ..., 63 S. Ct. 1165, 87 L. Ed. 995 (1943); IV R. 210.)

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[2] Both The East Ohio Gas Company and respondent, Hope Natural Gas Company, are wholly-owned subsidiaries of the Standard Oil Company (New Jersey).

[3] *East Ohio Gas Company v. City of Cleveland*, P. U. C. O. Nos. 11,001, 11,218, 11,442.

## STATUTE INVOLVED.

The statute involved is the Natural Gas Act (52 Stat. 821; 15 U. S. C. Sec. 717, *et seq.*), which became effective June 21, 1938.

The sections of the Natural Gas Act directly involved are Sections 1, 4(a), 5(a), 6, 13, 14(a), 16, 17(c), 19(b), which provide:

Sec. 1. "(a) As disclosed in reports of the Federal Trade Commission made pursuant to S. Rec. 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is hereby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

"(b) The provisions of this chapter shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas." (15 U. S. C. A. Sec. 717.)

Sec. 4(a). "(a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful." (15 U. S. C. A. Sec. 717c (a).)

Sec. 5(a) "(a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas

distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates." (15 U. S. C. A. Sec. 717d (a).)

Sec. 6. "(a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

"(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction." (15 U. S. C. A. Sec. 717e.)

Sec. 13. "Any State, municipality, or State commission complaining of anything done or omitted to be done by any natural-gas company in contravention of the provisions of this chapter may apply to the Commission by petition, which shall briefly state the facts, whereupon a statement of the complaint thus

made shall be forwarded by the Commission to such natural-gas company, which shall be called upon to satisfy the complaint or to answer the same in writing within a reasonable time to be specified by the Commission." (15 U. S. C. A. Sec. 717l.)

Sec. 14(a). "(a) The Commission may investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person has violated or is about to violate any provision of this chapter or any rule, regulation, or order thereunder, or to aid in the enforcement of the provisions of this chapter or in prescribing rules or regulations thereunder, or in obtaining information to serve as a basis for recommending further legislation to the Congress. The Commission may permit any person to file with it a statement in writing, under oath or otherwise, as it shall determine, as to any or all facts and circumstances concerning a matter which may be the subject of investigation. The Commission, in its discretion, may publish in the manner authorized by section 825k of Title 16, and make available to State commissions and municipalities, information concerning any such matter." (15 U. S. C. A. Sec. 717m (a).)

Sec. 16. "The Commission shall have power to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations as it may find necessary or appropriate to carry out the provisions of this chapter. Among other things, such rules and regulations may define accounting, technical, and trade terms used in this chapter; and may prescribe the form or forms of all statements, declarations, applications and reports to be filed with the Commission, the information which they shall contain, and the time within which they shall be filed. Unless a different date is specified therein, rules and regulations of the Commission shall be effective thirty days after publication in the manner which the Commission shall prescribe. Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe. For the purposes of its rules and regulations, the Commission may classify

persons and matters within its jurisdiction and prescribe different requirements for different classes of persons or matters. All rules and regulations of the Commission shall be filed with its secretary and shall be kept open in convenient form for public inspection and examination during reasonable business hours." (15 U. S. C. A. Sec. 717o.)

Sec. 17(c). "(c) The Commission shall make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies. Whenever the Commission can do so without prejudice to the efficient and proper conduct of its affairs, it may, upon request from a State commission, make available to such State commission as witnesses any of its trained rate, valuation, or other experts, subject to reimbursement of the compensation and traveling expenses of such witnesses. All sums collected hereunder shall be credited to the appropriation from which the amounts were expended in carrying out the provisions of this subsection." (15 U. S. C. A. Sec. 717p (c).)

Sec. 19(b). "(b) Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the order complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part. No objection to the order of the

Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 346 and 347 of Title 28, as amended." (15 U. S. C. A. Sec. 717r (b).)

## QUESTIONS PRESENTED.

1. Whether, for rate-making purposes under the Natural Gas Act, the Commission is authorized to use a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less depreciation, or whether it must use a rate base which reflects estimates of the extent and effect of post-investment fluctuations in labor and material prices.

2. Whether the Commission must include in actual legitimate cost amounts previously and correctly charged to operating expenses, in accordance with industry practice

of the time, and determined by the Commission to have been recouped through revenues from the rate payers.

3. Whether the lower court erred in holding that in determining the actual existing or accrued depletion and depreciation, the Commission failed to take into account "the present condition of the property."

4. Whether the Commission may determine actual existing or accrued depletion and depreciation, and the annual allowance in operating expenses for these factors, upon the basis of actual legitimate cost, or whether the Commission must base such determinations upon estimates of "present fair value" of the property.

5. Whether the economic-service-life principle, as applied by the Commission in this case, is a reasonable method of determining the actual existing depletion and depreciation and the annual allowance therefor.

6. Whether the lower court erred in holding that $165,965 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 operating expenses.

7. Whether the rates fixed by the Commission are just and reasonable in the statutory sense and nonconfiscatory in the constitutional sense.

8. Whether the Commission has jurisdiction to determine the **lawful** rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order.

9. Whether the lower court erred in holding that the Commission's "findings as to past rates * * * should be set aside."

## STATEMENT.

### 1. The respondent.

Hope Natural Gas Company, a wholly owned subsidiary of the Standard Oil Company (New Jersey), is conceded to be a "natural-gas company" within the meaning of the Natural Gas Act. (III R. 19.) Hope purchases and produces natural gas in West Virginia, transports it in pipe lines to the West Virginia-Ohio and West Virginia-Pennsylvania state lines, and there sells it in interstate commerce to its affiliates East Ohio Gas Company and River Gas Company for resale to ultimate consumers in Ohio; to its affiliate Peoples Natural Gas Company for resale to ultimate consumers in Pennsylvania; and to the nonaffiliated Manufacturers Light and Heat Company and Fayette County Gas Company for resale to ultimate consumers in Pennsylvania. (I R. 106-110.) East Ohio, River and Peoples, like Hope, are 100 per cent owned subsidiaries of the Standard Oil Company (New Jersey). (I R. 106.) About 85 per cent of Hope's total sales are in interstate commerce and 95 per cent of such sales are to its aforementioned affiliates—East Ohio, River, and Peoples. About 15 per cent of Hope's total volume of gas is sold in intrastate commerce to local consumers in West Virginia. (I R. 18.) Hope has been purchasing, producing, transporting and selling natural gas for more than forty years. Hope's interstate sales in 1940 amounted to about 53,000,000 M.c.f. and its interstate gross revenues in that year amounted to $19,296,000. (I R. 51.)

### 2. The proceedings before the Commission.

The proceedings before the Commission were initiated by the filing of the complaint by the City of Cleveland against Hope Natural Gas Company in Docket No. G-100 on July 6, 1938. Cleveland's was the first complaint filed under the Natural Gas Act, which became effective on June 21, 1938.

The material allegations of the complaint of the City of Cleveland may be shortly stated. (II R. 1.) The complainant City of Cleveland is an Ohio municipal corporation and a municipality within the meaning of the Natural Gas Act. (Cleveland Complaint, par. first.) The defendant Hope Natural Gas Company is a West Virginia corporation engaged in the sale of natural gas in interstate commerce. (Cleveland Complaint, par. second.) The defendant Hope is a wholly owned subsidiary of the Standard Oil Company (New Jersey). (Cleveland Complaint, par. third.) Defendant Hope sells gas produced in West Virginia and delivers said gas to its affiliate, The East Ohio Gas Company, likewise a wholly owned subsidiary of the Standard Oil Company (New Jersey), at the Ohio River. (Cleveland Complaint, par third.) The interest of the City of Cleveland in this proceeding arises because East Ohio, which is the only company distributing natural gas in Cleveland, purchases approximately 70 per cent of the gas which it merchandises in Cleveland and other municipalities in Ohio from its affiliate, the defendant Hope. (Cleveland Complaint, par. third.) Under an intercorporate contract between defendant Hope and East Ohio, East Ohio pays to Hope annually a total of approximately $13,000,000. (Cleveland Complaint, par. fourth.) In a proceeding then pending before The Public Utilities Commission of Ohio, Hope's affiliate, East Ohio, was then seeking to use the rate paid to Hope under the initial schedule filed by Hope with the Federal Power Commission, to support a claim that an ordinance rate of the City of Cleveland for the two years ending June 30, 1939, suspended by the filing of a bond, should be permanently set aside, and that higher rates should be imposed upon the consumers of gas in Cleveland than would otherwise be allowable. (Cleveland Complaint, par. sixth.) The complaint further alleged that, in any event, a determination by the Federal Power Commission of the fair,

just and reasonable rate for gas sold by Hope to East Ohio at the Ohio River, was essential to the determination of a fair, just and reasonable rate for natural gas to be sold in Cleveland during the next ordinance period beginning June 30, 1939. (Cleveland Complaint, par. sixth.) Cleveland alleged on that sixth day of July, 1938, that the price charged by Hope to East Ohio for gas for resale in Cleveland and elsewhere is excessive, unjust and unreasonable. (Cleveland Complaint, par. fifth.)

On January 6, 1939, the City of Cleveland filed an amendment to its complaint. (II R. 14-15.) The amendment pointed out that pursuant to Section 14(a) of the Act the Federal Power Commission has authority to investigate any facts, conditions, practices, or matters which it may find necessary or proper in order to determine whether any person has violated or is about to violate any provision of the Natural Gas Act. (Cleveland Amendment, par. first.) It suggested that pursuant to Section 14(a), the Federal Power Commission is specifically authorized to make available to state commissions and municipalities, information concerning any such matter. (Cleveland Amendment, par. second.) The Cleveland Amendment further averred that under Section 4(a) of the Natural Gas Act, all rates and charges made, demanded or received by any natural gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission must be just and reasonable and any such rate that is not just and reasonable is unlawful, and has been unlawful ever since the effective date of the Natural Gas Act on June 21, 1938. (Cleveland Amendment, par. third.) It urged that Congress had thus specifically authorized the Commission to investigate and determine whether the charges made by Hope Natural Gas Company and payments received from The East Ohio Gas Company were unjust, unreasonable and therefore contrary to Federal law, as of June 21, 1938, the effective date of the Natural Gas Act, and at all times subsequent thereto.

(Cleveland Amendment, par. fourth.) This amended complaint was itself filed under authority of Section 13 of the Natural Gas Act, which permits only a State, a municipality, or a State commission to file a complaint against anything done or omitted to be done by any natural gas company in contravention of the provisions of the Natural Gas Act. The Amendment to Cleveland's complaint specifically alleged that the price charged by Hope to East Ohio for natural gas on June 21, 1938, and has been at all times since excessive, unjust and unreasonable, at least in so far as said price has exceeded an average of 30 cents per M.c.f., and therefore was as of June 21, 1938, and has been at all times since, unlawful and contrary to the laws of the United States. (Cleveland Complaint, par. sixth.) The Federal Power Commission was urged to make the determination upon the ground that under the Natural Gas Act, Section 1, the only body which can determine in the first instance whether the price charged by Hope to East Ohio and received by Hope from East Ohio has been unlawful and contrary to the laws of the United States is the Federal Power Commission. (Cleveland Complaint, par. seventh.) The City's Amendment to Complaint asserted finally that a determination by the Federal Power Commission in accordance with the prayer of this amendment should be of assistance in the cases of Cleveland and other Ohio municipalities then pending before The Public Utilities Commission of Ohio, in that the reasonableness of the suspended ordinance rate in Cleveland for the two year period ending June 30, 1939, is ultimately dependent upon the lawfulness of the charge made by Hope Natural Gas Company to The East Ohio Gas Company at the Ohio River, and in the case of the affiliated *East Ohio Gas Company v. Cleveland*, then pending before The Public Utilities Commission of Ohio, no allowance can be made in the operating expenses of East Ohio which is unlawful either for the affiliated buyer to pay or for the affiliated seller to charge or receive. (Cleveland Amendment to Complaint, par. seventh.)

At the trial before the Commission, the City's amended complaint was modified. (Reply Brief of City of Cleveland before Federal Power Commission, filed September 30, 1941.) The City reported that during the Federal Power Commission's investigation and hearings in the Hope case, the Ohio Commission had decided the related *East Ohio Gas Company* case involving Cleveland natural gas rates for the two year period ended June 30, 1939. (*East Ohio Gas Company v. Cleveland*, 27 P. U. R. (N. S.) 387 (decided January 10, 1939); aff'd *The East Ohio Gas Company v. Public Utilities Commission of Ohio* (two cases), 137 O. S. 225 (1940).) Hence the City conceded that the lawfulness of the Hope-East Ohio rate from June 21, 1938 to June 30, 1939 had become moot. However, Cleveland further advised the Federal Power Commission that by reason of the pendency of another East Ohio appeal to the Ohio Commission from a later Cleveland rate ordinance, the ownership of moneys collected under bond by East Ohio in Cleveland since June 30, 1939, was still in issue in 1941 under the retroactive rate-fixing powers of the Ohio Commission. (Ohio General Code, Sec. 614-44-614-47, both inclusive.) (*East Ohio Gas Company v. Cleveland*, P. U. C. O. Nos. 11,001, 11,218 and 11,442.) Therefore, the City modified its complaint as amended by relating its charge that Hope had violated the Natural Gas Act, Section 4(a) by charging East Ohio an unreasonable rate and by not charging East Ohio a reasonable rate, only to the period since and after June 30, 1939. (Reply Brief of City of Cleveland before Federal Power Commission filed September 30, 1941.)

The Complaint of the City of Cleveland, as so amended and modified, thus prayed (1) for an investigation by the Federal Power Commission, a finding that the Hope-East Ohio rate *is* excessive and unreasonable, and for the fixing of a just, fair and reasonable rate for the future; (2) that the Commission determine separately in aid of state regulation that the Hope-East Ohio rate *has been* unjust, un-

reasonable and unlawful from June 30, 1939 to the date of its determination, and that the Commission further determine that a reasonable Hope-East Ohio rate for such period was not more than 30 cents per M.c.f.

The allegations of Cleveland's complaint as amended were put in issue by the answer of Hope Natural Gas Company to complaint of the City of Cleveland, filed August 18, 1938 (II R. 3) and by the answer of Hope Natural Gas Company to amendment to complaint of the City of Cleveland filed February 6, 1939. (II R. 16.)

A complaint against Hope similar to that filed by the City of Cleveland was filed by the City of Akron in July of 1938, charging that the rate collected by Hope from East Ohio was excessive and unreasonable. (II R. 7.) In October, 1938, the Federal Power Commission, on its own motion, instituted an investigation to determine the reasonableness of all Hope's interstate rates. (II R. 28.) In March, 1939, the Pennsylvania Public Utility Commission filed a complaint with the Federal Power Commission, charging that the rates collected by Hope from Peoples Natural Gas Company, Manufacturers Light and Heat Company, and Fayette County Gas Company, were unreasonable. (II R. 18.) In October, 1939, the Federal Power Commission consolidated the three complaint cases and its own investigation of Hope's interstate wholesale rates for hearing. (II R. 34.) On December 20, 1940, the Commission denied without prejudice a motion of the Cities of Cleveland and Akron for an immediate order reducing the Hope-East Ohio rate upon the Hope company's own testimony, upon the ground that "there is insufficient evidence of record, at this time, to support the prayer for relief requested by movants," and subject to the reservation that "this order is not to be construed as a determination of any of the issues in the pending principal proceeding." (II R. 43.) Hearings were held in 1940 and 1941, and after briefs were filed, the case was argued orally before the Commission sitting *en banc* on October

27, 1941. (II R. 48.) The Commission decided the case on May 26, 1942 (I R. 1, 8) when it entered its "Order Reducing Rates" charged by Hope and in addition, made separate "Findings as to Lawfulness of Past Rates" collected by Hope from East Ohio.

**3. The Commission's Determinations.**

The Commission's "Order Reducing Rates" required Hope to reduce its interstate rates for the future to reflect a reduction of not less than $3,609,857 in operating revenues on an annual basis. (I R. 6.) More particularly, the order required minimum reductions of 7 cents per M.c.f. from the 36.5 cent and 35.5 cent rates previously charged the affiliates, East Ohio and Peoples, respectively, and 3 cents per M.c.f. from the 31.5 cent rate previously charged the non-affiliates, Fayette County and Manufacturers Light and Heat. (I R. 73-74.) The Commission's "Findings as to Lawfulness of Past Rates," made in deciding the complaint of the City of Cleveland, determined that the rates collected by Hope from East Ohio were unjust, unreasonable, excessive, and therefore unlawful, by $830,892 in 1939, $3,219,551 during 1940 and $2,815,789 on an annual basis since 1940; it further determined just, reasonable and lawful rates for gas sold to East Ohio for resale for ultimate public consumption to be $11,528,608 for 1939, $11,507,185 for 1940 and $11,910,947 on an annual basis for 1941 and the first half of 1942. (I R. 12-13.)

The Commission founded its "Order Reducing Rates" upon a rate base of $33,712,526, upon which it granted respondent a 6½ per cent rate of return (I R. 4), or $2,191,314, annually. The rate base was determined to be the actual legitimate cost of, or gross investment in, Hope's interstate property less existing depletion and depreciation, plus allowances for unoperated acreage, working capital and future net capital additions. (I R. 50.)

The Commission's rate base was arrived at substantially as follows: The Commission found that Hope had

kept complete documentary evidence, through books, records and vouchers, of its expenditures throughout its existence, so that no estimates were required to ascertain the actual legitimate cost. (I R. 23, 174.) Pursuant to a check of the inventory of Hope's property in service and examination, analysis and audit of respondent's records, the Commission determined the cost to be $52,174,873 for the property devoted to the interstate sales, as of December 31, 1940. (I R. 36.) From this amount, the Commission then deducted accrued depletion and depreciation, which it found to be $22,328,016. (I R. 45-50.) It arrived at this figure by applying the economic-service-life method to actual legitimate cost. (I R. 41.) In making these determinations the Commission was guided by a study conducted by a qualified staff engineer, who made a field inspection of the Company's physical properties to aid in the determination of service lives. (I R. 42.) The actual existing depletion and depreciation found by the Commission came to about $24,000,000 less than the depletion and depreciation which the Company had accrued on its books. (I R. 81.) One of the Commissioners dissented on the ground that the Commission should have deducted accrued depreciation and depletion of not less than $38,000,000, the reserve remaining on the Company's books after it had transferred $7,500,000 from the reserve to surplus. (I R. 81.) The Commission then added $1,392,021 for future net capital additions, $566,105 for useful unoperated acreage and $2,125,000 for working capital, yielding the total rate base of $33,712,526. (I R. 50.)

Using 1940 as a test year to forecast future revenues, and forecasting expenses at the 1940 figure plus $421,160, the Commission allowed respondent operating expenses and taxes amounting to $13,495,584. (I R. 62, 70, 72.) Of this total $1,460,037 represented the annual allowance for depreciation and depletion. (I R. 53.) This allowance was determined by the Commission in the same way as the actual existing depreciation and depletion, by the

application of the economic-service-life method to the actual legitimate cost of respondent's properties. (I R. 51-52.)

The Commission's "Findings as to Lawfulness of Past Rates" were arrived at on the same principles and in substantially the same manner as the "Order Reducing Rates," except that they were based on actual operating experience for the years in question, instead of a test year. (I R. 11.)

In issuing its order and findings the Commission rejected respondent's argument that post investment changes in price levels had to be reflected in the rate base and in computing both accrued depreciation and depletion and the annual allowance in operating expenses for depreciation and depletion. (I R. 20-23, 36, 41, 52.) It condemned as hypothetical and without probative value the "reproduction cost new" and "trended original cost" estimates (amounting to approximately $97,000,000 and $105,000,000 respectively) submitted in evidence by respondent in support of its claimed rate base of some $66,000,000. (I R. 20-23.) The Commission also rejected respondent's contention that, in any event, the rate base should have reflected an additional sum of about $17,000,000, representing largely expenditures for well-drilling prior to 1923, which respondent had charged to operating expense. (I R. 24-34.) Likewise unsuccessful were respondent's espousal of the "per cent condition" theory of measuring accrued depreciation (I. R. 38), its claim that an expenditure of $165,965 for a deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 operating expenses, and its argument that the annual allowance for depletion and depreciation should take account of the capital additions recognized after 1940.

Pursuant to Section 19 of the Act, Hope filed an application for rehearing (II R. 51), and upon denial, petitioned the United States Circuit Court of Appeals for the Fourth Circuit for a review of the Commission's "Order

Reducing Rates" and the Commission's "Findings as to Lawfulness of Past Rates," naming the Federal Power Commission, the City of Cleveland, the City of Akron, and the Pennsylvania Public Utility Commission as parties respondent. (IV R. 1.) Hope did not seek a stay of the Commission's order from the Court of Appeals and such order has not been stayed; instead Hope agreed with its customer companies to charge the ordered rates pending litigation, upon the customers' agreement to make Hope whole if the Commission's order should be finally invalidated.

**4. The Opinion Below.**

On review, the court below, with one judge dissenting, set aside the Commission's "Order Reducing Rates" on the basic grounds that: (1) the Commission's use of a prudent investment rate base failed to reflect "present fair value," in view of the post investment, "decided change in price levels" shown by the record and judicially noticeable (IV R. 172, 184); (2) the Commission erroneously excluded from the rate base the well-drilling costs charged to operating expenses prior to 1923 (IV R. 172, 184-189); (3) the Commission improperly determined accrued depreciation on the basis of "mere formulas," without considering the present physical condition of respondent's property (IV R. 172, 190); (4) the Commission should have based its annual allowance in operating expenses for depreciation and depletion upon the "present fair value" of the physical property, instead of upon actual legitimate cost (IV R. 194-196); (5) the Commission should have included in 1940 operating expenses $165,963 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941 (IV R. 198); (6) the Commission should have made an annual allowance for depreciation and depletion on capital added to the rate base after 1940. (IV R. 196.)

The lower court also set aside the Commission's "Findings as to Lawfulness of Past Rates," holding (1) that the Commission had no jurisdiction to make findings as to the lawfulness of past rates "to be given effect in rate proceedings before state commissions," and that rates filed with the Commission under Section 4(c) of the Act became the only "lawful" ones which the utility could charge or accept until changed by the Commission; (2) that the Commission could investigate "the conditions and rates of the past" as an incident of its power to fix future rates, but that so viewed the findings in question were invalid for the same reasons as its "Order Reducing Rates," and were also objectionable in that they were based on actual experience for the years in question, rather than reasonable estimates of expenses based on experience during a prior period. (IV R. 203.) The Court further held that if the Commission has jurisdiction to determine lawful rates for a period subsequent to the passage of the Natural Gas Act and prior to the making of an order fixing future rates, its determination is, in effect, an order of the Commission affecting substantial rights and contractual relationships of a party to a proceeding before it and is reviewable as such. (IV R. 203.) On March 8, 1943, the Circuit Court granted a motion for the stay of its mandate pending further order, upon the condition that a petition for writ of certiorari be filed with the Supreme Court of the United States within thirty days. (IV R. 208.)

## SPECIFICATION OF ERRORS TO BE URGED.

1. The Court of Appeals erred in holding that for rate-making purposes under the Natural Gas Act, the Commission is not authorized to use a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less depreciation, but that it must use a rate base which reflects estimates of the extent and effect of post investment fluctuations in labor and material prices.

2. The Court of Appeals erred in holding that the Commission must include in actual legitimate cost amounts previously and correctly charged to operating expenses, in accordance with industry practice of the time and determined by the Commission to have been recouped through revenues from the rate payers.

3. The Court of Appeals erred in holding that in determining the actual existing or accrued depletion and depreciation, the Commission failed to take into account "the present condition of the property."

4. The Court of Appeals erred in holding that the Commission may not determine actual existing or accrued depletion and depreciation, and the annual allowance in operating expenses for these factors, upon the basis of actual legitimate cost, but that the Commission must base such determinations upon estimates of "present fair value" of the property.

5. The Court of Appeals erred in holding that the economic service-life principle, as applied by the Commission in this case is not a reasonable method of determining the actual existing depletion and depreciation and the annual allowance therefor.

6. The Court of Appeals erred in holding that $165,963 for an experimental deep-test well, which was completed dry and charged to operating expenses in 1941, should have been included in 1940 expenses.

7. The Court of Appeals erred in holding that the rates fixed by the Commission are not just and reasonable in the statutory sense and are confiscatory in the constitutional sense.

8. The Court of Appeals erred in holding that the Commission has no jurisdiction to determine the *lawful* rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order.

9. The Court of Appeals erred in holding that the Commission's "Findings as to past rates * * * should be set aside."

## SUMMARY OF ARGUMENT.

### I.

The Court of Appeals erred in holding that the Commission's "Order Reducing Rates" and "Findings as to Lawfulness of Past Rates" are unconstitutional, for the reason, among others, that there is no constitutional question involved in this case.

No person is deprived of property and there is no taking of private property within the meaning of the Fifth Amendment. By reason of the 100 per cent common ownership of respondent and respondent's principal customers by the Standard Oil Company (New Jersey), neither the Federal Power Commission's "Order Reducing Rates" nor its "Findings as to Lawfulness of Past Rates" substantially reduces, without further administrative action, the system's revenues or the annual return available to the owner of the business.

### II.

The Court of Appeals further erred in setting aside the Federal Power Commission's "Order Reducing Rates," for the reason that said order is authorized by the Natural Gas Act, and is based upon findings which have a rational basis and are supported by substantial evidence.

The Court of Appeals erred in holding that for rate-making purposes under the Natural Gas Act, the Commission is not authorized to use a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less the depreciation therein but that it must use a rate base which reflects estimates of the extent and effect of post investment fluctuations in labor and material prices. The Natural Gas Act does not provide

either expressly or by necessary implication that the lowest just and reasonable rate which the Commission may fix is one which yields a reasonable return upon the "present value" of the physical property. Under the Natural Gas Act, the selection of an appropriate rate base is a matter of sound discretion for the Federal Power Commission. The Commission's selection of a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less the depreciation therein was a reasonable exercise of discretion.

The Court of Appeals erred in holding that the Commission's findings of actual legitimate cost, the depreciation therein, the annual allowance for depreciation, and the dry hole as an operating expense of 1941, were not conclusive upon the court since each of said findings has a rational basis and is supported by substantial evidence.

## III.

Even if there were a constitutional question involved, as there is not, the Court of Appeals further erred in setting aside the Federal Power Commission's "Order Reducing Rates" for the reason that in the absence of an exercise of the power of eminent domain or other direct appropriation of property for the use of the United States Government, respondent was not entitled under the Fifth Amendment to anything more than due process of law.

## IV.

The Court of Appeals erred in holding that the Federal Power Commission has no jurisdiction to determine the lawful rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order for the reason that said jurisdiction is implied from expressly granted powers, and is supported by the legislative history of the statute.

The jurisdiction of the Commission to determine lawful rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and, prior to the issuance of a Commission rate-fixing order is implied from the expressly granted power to determine upon complaint of a municipality and upon the Commission's own investigation that the Act has been violated by charging an unlawful rate and by not charging a lawful rate.

The power to determine a reasonable and lawful rate for a reasonable period antedating the Commission's first order fixing rates for the future is implied from the expressly granted power to fix reasonable future rates.

The holding of the Court of Appeals that the Federal Power Commission is without jurisdiction to determine lawful rates for a period subsequent to the passage of the Natural Gas Act and prior to an initial rate-fixing order thwarts and defeats the intent and purpose of Congress.

## V.

The Court of Appeals further erred in holding that the Commission's "Findings as to Lawfulness of Past Rates" should be set aside even if the Commission has jurisdiction to make such findings, for the reason that said findings have a rational basis and are supported by substantial evidence.

## ARGUMENT.

### I.

### THE COURT OF APPEALS ERRED IN HOLDING THAT THE COMMISSION'S "ORDER REDUCING RATES" AND "FINDINGS AS TO LAWFULNESS OF PAST RATES" ARE UNCONSTITUTIONAL, FOR THE REASON, AMONG OTHERS, THAT THERE IS NO CONSTITUTIONAL QUESTION INVOLVED IN THIS CASE.

**No person is deprived of property and there is no taking of private property within the meaning of the Fifth Amendment.**

**By reason of the 100 per cent common ownership of respondent and respondent's principal customers by the Standard Oil Company (New Jersey), neither the Federal Power Commission's "Order Reducing Rates" nor its "Findings as to Lawfulness of Past Rates" substantially reduces, without further administrative action, the system's revenues or the annual return available to the owner of the business.**

Contrary to the holding of the court below (IV R. 1847) there is no question of confiscation under the Fifth Amendment involved in this case.

A regulation of the rates of a corporation can deprive a person of property within the meaning of the Fifth Amendment only by reducing the earnings available for interest to bondholders and dividends to stockholders. *Chicago, etc., Railway Company v. Wellman*, 143 U. S. 339, 345 (1892) (Mr. Justice Brewer).

In *McCart v. Indianapolis Water Company*, 302 U. S. 419, 433-434 (1938), Mr. Justice Black, dissenting, said:

> "The doctrine against confiscatory rates is based upon the theory of protecting the right of bondholders to their interest and that of stockholders to a fair return upon the value of their actual investments. While this matter has been confused by the 'reproduction cost' theory, the fact remains that, as applied to corporations, it is the interest of the stockholders and bondholders which the due process clause protects."

Where the seller and purchaser are corporations owned by the same stockholder, and there are no bondholders, a reduction in rates of the seller alone reduces *pro tanto* the costs of the purchaser, and there is no deprivation of property, because no reduction in the earnings available for dividends to the stockholder. The Federal Power Commission under the Natural Gas Act, unlike the Interstate Commerce Commission under the Interstate Commerce Commission Act and the Federal Communications Commission under the Federal Communications Commission Act, does not by its order control the rate which the public shall pay. Under the Natural Gas Act, the regulation of local distribution rates is left to the states. (Natural Gas Act, Section 1(b), *supra*, p. 3.)

A mere division order of the Interstate Commerce Commission does not take private property for the public. See *B. & O. Railroad Company v. United States*, 298 U. S. 349 (1936), concurring opinion of Justices Brandeis, Stone, Roberts, and Cardozo, pages 382-383. With even greater force it may be said that an order of the Federal Power Commission reducing rates charged by a 100 per cent owned subsidiary to another 100 per cent owned subsidiary of the same holding company does not take private property for the public. That is this case.

The Federal Power Commission's "Order Reducing Rates" in this case does not, standing alone, without further administrative action, substantially reduce the annual return available for dividends to respondent's sole stockholder, Standard Oil Company (New Jersey). *A fortiori*, the Federal Power Commission's "Findings as to Lawfulness of Past Rates" do not, in the absence of further administrative action, reduce the annual return available to respondent's sole stockholder.

Respondent, Hope Natural Gas Company, is wholly owned by the Standard Oil Company (New Jersey). (*Supra*, p. 9.) The three principal interstate customer companies of respondent, namely The East Ohio Gas Company,

Peoples Natural Gas Company, and River Gas Company, are likewise wholly owned by the Standard Oil Company (New Jersey). (*Supra*, p. 9.) The Federal Power Commission's "Order Reducing Rates" of respondent, Hope Natural Gas Company, reduces *pro tanto* the operating costs of petitioner's affiliates, East Ohio, Peoples, and River, and increases *pro tanto* the return available for dividends to Standard from these affiliates, unless and until some action is taken by a state commission which reduces the revenue received by the system from the gas consuming public.

Respondent conceded in its brief before the United States Circuit Court of Appeals for the Fourth Circuit that "to have either reductions or increases in gas rates reflected to consumers requires not merely the approval of the Federal Power Commission but of the state commission" (*Hope Natural Gas Company v. Federal Power Commission, et al.*, C. C. A. 4, No. 4979, Brief of Petitioner, Hope Natural Gas Company, p. 118.) As to the three principal interstate customers of respondent, the Federal Power Commission's "Order Reducing Rates" does not therefore reduce the annual return available for dividends to respondent's sole stockholder Standard Oil Company (New Jersey).

The inconsequential reduction in respondent's rates to The Manufacturers Light and Heat Company and the Fayette County Gas Company, which are not owned by the Standard Oil Company (New Jersey), included in the Commission's "Order Reducing Rates," does not reduce the total return available for dividends to the Standard Oil Company (New Jersey) in an amount sufficient to lay any ground for a claim of confiscation.

The Federal Power Commission's "Order Reducing Rates," standing alone, thus reduces the annual return available for dividends for respondent's sole stockholder Standard Oil Company (New Jersey) in a total

amount of not to exceed $55,815 per year. (I R. 6, 51.)[1] This reduction of the annual return available for dividends to Standard Oil, being only 8/100 of one per cent of respondent's claimed rate base of $66,000,000, constitutes no basis for invoking the Fifth Amendment to the Constitution of the United States. The respondent's petition for review made no complaint of the absence of an allocation as between the affiliated and nonaffiliated customers (IV R. 1-42), and petitioner has no basis for a claim that the 3 cents per M.c.f. reduction in the nonaffiliated Manufacturers and Fayette County rate (as compared with the 7 cent reduction in rates to affiliates Peoples and East Ohio) is separable from the effect of the order as a whole, and no such claim has been made. Cf. *Puget Sound Traction Co. v. Reynolds*, 244 U. S. 574, 579-80 (1917) (Mr. Justice Pitney).

For the court below to invoke the Fifth Amendment at this time is at least premature. See *Dayton Power and Light Company v. Public Utilities Commission of Ohio*, 292 U. S. 398, 414-5 (1934) (Mr. Justice Cardozo).

The court below erroneously concluded that a question of confiscation was involved, because the Federal Power Commission's order in this case manifestly works no deprivation of property of any person within the meaning of the Fifth Amendment to the Constitution of the United States.

"The Constitution," as Mr. Justice Holmes once said, "is not to be satisfied with a fiction." *Hyde v. United States*, 225 U. S. 347, 390 (1912) (Mr. Justice Holmes, dissenting).

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[1] **Reduction of Net Income after Federal Income Taxes from Nonaffiliated Companies**

| | Before Reduction | After Reduction | Reduction |
|---|---|---|---|
| Fayette | $270,618 | $244,845 | $25,773 |
| Manufacturers | 706,131 | 638,880 | 67,251 |
| | $976,749 | $883,725 | $93,024 |
| Total Income Tax 40% | | | 37,209 |
| Reduction in Net Income after Fed. In. Tax | | | $55,815 |

## II.

**THE COURT OF APPEALS FURTHER ERRED IN SETTING ASIDE THE FEDERAL POWER COMMISSION'S "ORDER REDUCING RATES" FOR THE REASON THAT SAID ORDER IS AUTHORIZED BY THE NATURAL GAS ACT, AND IS SUPPORTED BY SUBSTANTIAL EVIDENCE.**

**A. The Court of Appeals erred in holding that for rate-making purposes under the Natural Gas Act, the Commission is not authorized to use a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less the depreciation therein, but that it must use a rate base which reflects estimates of the extent and effect of post investment fluctuations in labor and material prices.**

It is conceded that the Commission gave no weight to the Company's evidence of post-investment changes in labor and material prices. The question presented is whether the statute requires the Commission to give some, if not controlling weight, to evidence of reproduction or trended original cost or other evidence of "present value" of the physical property in arriving at a rate base.

**1. The Natural Gas Act does not provide either expressly or by necessary implication that the lowest just and reasonable rate which the Commission may fix is one which yields a reasonable return upon the "present value" of the physical property.**

The court below erroneously concluded that under the Natural Gas Act, the lowest just and reasonable rate which the Commission may fix is one which yields a reasonable return upon the "present value" of the physical property of the natural gas company. (IV R. 174-180.)

Sections 5(a) and 6(a) of the Natural Gas Act provide:

> Sec. 5(a) "(a) Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or col-

lected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: *Provided, however,* That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates."

Sec. 6(a) "(a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property."

The statute manifestly does not provide that the lowest just and reasonable rate which the Commission may fix is one which yields a reasonable return upon the "present value" of the physical property of a natural gas company. Section 5(a) merely provides that the rates fixed by the Commission shall be just and reasonable. It sets up no standard beyond that. *Federal Power Commission v. Natural Gas Pipeline Company,* 315 U. S. 575 (1942) (concurring opinion of Black, Douglas and Murphy, *JJ.*, at page 606).

Section 6(a) does not require the Commission to determine present value. It does not require the Commission to determine prudent investment. It does not require the Commission to determine fair value. It does not require

the Commission to determine any rate base. The language of the section is wholly permissive. The Commission "may" investigate and ascertain the actual legitimate cost of the property of every natural gas company and depreciation therein. The Commission "may" ascertain and determine other facts only "when found necessary for rate-making purposes." In the absence of such a finding of necessity, the statute does not in terms even permit the Commission to ascertain and determine "other facts which bear on the determination of such cost or depreciation and the fair value of such property." This is the single plain meaning of the statute.

The legislative history of the companion section of the Federal Power Act, enacted as Section 208 of Title 2 of the Public Utility Act of 1935, supports and confirms this single plain meaning of Section 6(a) and Section 5(a) of the Natural Gas Act. In adopting the Federal Power Act, Congress rejected an amendment offered by Senator Bailey, requiring the use of "fair value" as the rate base. (79 Cong. Rec. 8858.) In adopting the Federal Power Act, Congress also rejected a draft which provided that in determining just and reasonable rates, the Commission shall fix a rate base "not in excess of the actual legitimate cost of the property used and useful for the service in question, less the depreciation therein." Section 208 of Title 2 of the Public Utility Act of 1935; Sec. 208 of S. 2796, 74th Cong. First Session; Senate Report No. 621, 74th Cong. First Session, p. 52; 79th Cong. Rec. 9065; Senate Report No. 621, 74th Cong. First Session, p. 20; House Report No. 1318, 74th Cong. First Session, p. 30. The legislative history thus supports the conclusion apparent on the face of the Natural Gas Act that Congress did not intend to impose upon the Federal Power Commission as a mandatory requirement the use of "present value" or any other rate base formula.

Even if the word "may" used in Section 6(a) of the Natural Gas Act were interpreted to mean "shall," the

statute could not be construed to require the Commission to base rates on "present value."

As the Special Committee of the Public Utility Law section of the American Bar Association said in its report to the annual meeting of the association in September, 1940 (1940 Report of the American Bar Association, pp. 14-15) (quoted in *City of Detroit v. Panhandle Eastern Pipe Line Company*, 45 P. U. R. (N. S.) 203 (September 23, 1942)):

> "It will be noted that the primary duty of the Commission under these two provisions (Fed. Power Act, Sec. 208, Natural Gas Act, Sec. 6) is to ascertain the cost of the property and the depreciation therein, and that 'other facts which bear on the determination of such cost or depreciation, and the fair value of such property' are to be determined only 'when found necessary for rate making purposes.' There is here the possible inference that the Congress, when it drafted this provision, was hopeful that the courts would decide that nothing other than the 'actual legitimate cost' of the property would be 'found necessary for rate making purposes.' However that may be it is patent that an accounting or cost rate base was dominant in the congressional mind, and that these very recent statutes in that respect are the very antithesis of some of the older state statutes which prescribe the reproduction cost new less depreciation formula."

Had Congress intended to impose upon the Federal Power Commission the "mischievous" doctrine of *Smyth v. Ames*, 169 U. S. 466, as developed into the doctrine of "present value," see *West v. Chesapeake and Potomac Telephone Company*, 295 U. S. 662 (1935) (Mr. Justice Roberts), as a matter of statutory requirement, the Congress surely would have at least used language such as it did use in Section 15a added to the Interstate Commerce Act by the Transportation Act, 1920, which had been held apt to that purpose. *St. Louis and O'Fallon Railroad Company v. United States*, 279 U. S. 461, 478, (1929) (Mr.

Justice McReynolds) (Brandeis, Holmes, and Stone, *JJ.*, dissenting).

Neither in the express words of the statute nor in its legislative history is there any support for the conclusion of the court below that the Natural Gas Act impliedly requires that the lowest just and reasonable rate which the Commission may fix is one which yields a reasonable return upon the "present value" of the physical property.

**2. Under the Natural Gas Act, the selection of an appropriate rate base is a matter of sound discretion for the Federal Power Commission.**

In *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575 (1942), Justices Black, Douglas and Murphy, concurring, said at page 606:

> "Yet it is important to note, as we have indicated, that Congress has merely provided in § 5 of the Natural Gas Act that the rates fixed by the Commission shall be 'just and reasonable.' It has provided no standard beyond that. Congress, to be sure, has provided for judicial review. But § 19(b) states that the 'finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive.' In view of these provisions, we do not think it is permissible for the courts to concern themselves with any issues as to the economic merits of a rate base. The Commission has a broad area of discretion for selection of an appropriate rate base. * * *"

The Natural Gas Act legislatively reflects the doctrine of administrative discretion urged by Mr. Justice Frankfurter, concurring, in *Driscoll v. Edison Light and Power Company*, 307 U. S. 104, 122 (1939), when he said:

> "* * * The determination of utility rates—what may fairly be exacted from the public and what is adequate to enlist enterprise—does not present questions of an essentially legal nature in the sense that legal education and lawyers' learning afford peculiar competence for their adjustment. These are matters for the applica-

tion of whatever knowledge economics and finance may bring to the practicalities of business enterprise. The only relevant function of law in dealing with this intersection of government and enterprise is to secure observance of those procedural safeguards in the exercise of legislative powers which are the historic foundations of due process."

In the case at bar, Dobie, Circuit Judge, dissenting below, said (IV R. 205):

> "A careful study of the Natural Gas Act (particularly the precise wording of Section 6) convinces me that Congress intended to give to the Federal Power Commission a wider latitude and a more extended discretion than had been given to any other federal board or commission under any previous statute in the field of rate making."

A mere standard of reasonableness, without the express requirement of a fair return on fair value, delegates to the Commission only a mediating administrative discretion, see *Freund, Administrative Powers over Persons and Property* (1928) p. 84; and in the Natural Gas Act, the discretion of the Commission is not even qualified by directing the consideration of specified factors.

The function of a rate base is to shed light upon the question of how much a utility will be allowed to earn. See *Group of Institutional Investors v. Chicago Railroad*, 318 U. S. 523, 540 (1943) (Mr. Justice Douglas).

Where the statute specifically authorizes the Commission to fix the lowest reasonable rate, as does the Act here involved (Natural Gas Act Sec. 5(a), *supra*, p. 4; *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 583 (Mr. Chief Justice Stone)), the Commission is at liberty to seek the lowest reasonable measure of a rate base as the limit below which the return can not go within the contemplation of reasonable men. Cf. Bentel, *Valuation as a Requirement of Due Process*, 43 Harvard L. R. 1249, 1253, note 14.

It is therefore respectfully submitted that under the Natural Gas Act, the selection of an appropriate rate base is a matter of sound discretion for the Commission. Cf. *Gray v. Powell*, 314 U. S. 402 (1941) (Mr. Justice Reed); *I. C. C. v. Illinois Central*, 215 U. S. 452, 477-478 (1910) (Mr. Justice White); and see *Brown, Fact and Law in Judicial Review*, 56 Harvard Law Review 899, 921-926 (1943).

**3. The Commission's selection of a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less the depreciation therein was a reasonable exercise of discretion.**

Actual legitimate cost less the depreciation therein is a recognized measure of prudent investment. 74th Congress 1st Sess. Senate Report No. 621, p. 52, Section 208 (May 13, 1935). *Re Canadian River Gas Company*, 43 P. U. R. (N. S.) 205 (F. P. C.) (1942); *Detroit v. Panhandle Eastern Pipe Line Company*, 45 P. U. R. (N. S.) 203 (F. P. C.) (1942); *Re Chicago District Electric Generating Corporation*, 39 P. U. R. (N. S.) 263 (F. P. C.) (1941); *Re Interstate Natural Gas Company* (F. P. C.) 48 P. U. R. (N. S.) 267 (1943); *Bonbright, Valuation of Property*, Vol. II, p. 1139.

Prudent investment has long been considered a reasonable measure of a rate base.

In *Boston and Worcester Railroad Corp. v. Western Railroad Corp.*, 80 Mass. 253, 260 (1859) (Merrick, *J.*), the Supreme Judicial Court of Massachusetts said:

> "* * * It would without doubt be reasonable that the proprietors of a railroad which had been judiciously located and prudently constructed and afterwards properly managed, should annually receive an aggregate sum for all the services of every kind performed by them, at least equal to legal interest upon the amount of their investment, after payment of all current expenses and charges necessarily incurred in preserving their road and its appendages from waste and

depreciation. It is easy to state, and to see the justice and equity of this general proposition."

In *Southwestern Bell Telephone Company v. Public Service Commission of Missouri*, 262 U. S. 276, Mr. Justice Brandeis, with whom Mr. Justice Holmes joined, concurring, said at pages 306-307:

> "The adoption of the amount prudently invested as the rate base and the amount of the capital charge as the measure of the rate of return would give definiteness to these two factors involved in rate controversies which are now shifting and treacherous, and which render the proceedings peculiarly burdensome and largely futile. Such measures offer a basis for decision which is certain and stable. The rate base would be ascertained as a fact; not determined as matter of opinion. It would not fluctuate with the market price of labor, or materials, or money. It would not change with hard times or shifting populations. It would not be distorted by the fickle and varying judgments of appraisers, commissions, or courts. It would, when once made in respect to any utility, be fixed, for all time, subject only to increases to represent additions to plant, after allowance for the depreciation included in the annual operating charges. The wild uncertainties of the present method of fixing the rate base under the so-called rule of *Smyth v. Ames* would be avoided; and likewise the fluctuations which introduce into the enterprise unnecessary elements of speculation, create useless expense, and impose upon the public a heavy, unnecessary burden."

On September 22, 1932, Governor Franklin D. Roosevelt said in an address on the subject of power control, delivered at Portland, Oregon, and broadcast to the nation (I Public Papers and Addresses of Franklin D. Roosevelt 727):

> "I seek to protect both the consumer and the investor. To that end I propose and advocate now, as I have proposed and advocated heretofore, the following remedies on the part of the government for the

regulation and control of public utilities engaged in the power business and companies and corporations relating thereto:

"'7. Abolishing by law the reproduction cost theory for rate making and establishing in place of (it) the actual money prudent investment principle as the basis of rate-making.'"

In *Federal Power Commission v. Natural Gas Pipeline Company of America*, 315 U. S. 575, Justices Black, Douglas and Murphy, concurring, said at pages 606-607:

"'* * * The requirements of 'just and reasonable' embrace, among other factors, two phases of the public interest: (1) the investor interest; (2) the consumer interest. The investor interest is adequately served if the utility is allowed the opportunity to earn the cost of the service. That cost has been defined by Mr. Justice Brandeis as follows: 'Cost includes not only operating expenses, but also capital charges. Capital charges cover the allowance, by way of interest, for the use of the capital, whatever the nature of the security issued therefor; the allowance for risk incurred; and enough more to attract capital.' *Southwestern Bell Telephone Co. v. Public Service Commission, supra*, 262 U. S. at p. 291. Irrespective of what the return may be on 'fair value,' if the rate permits the company to operate successfully and to attract capital all questions as to 'just and reasonable' are at an end so far as the investor interest is concerned. * * *'"

*In the Matter of Minnesota Power and Light Company*, Docket No. IT 5769, decided March 12, 1942, approximately two months before the decision in the instant case, the Federal Power Commission said:

"Reclassification and original cost studies are an essential aid to prosecution of the war effort in that they provide a sound basis for the most effective control of the prices of utility services entering into practically every important essential war activity as well as into the general cost of living. The availability of such regulation as a means of warding off the dangers

of inflation in this field apparently led the Congress specifically to exempt the control of public utility prices from the provisions of the Emergency Price Control Act of 1942."

In the instant case, Dobie, Circuit Judge, dissenting below, said (IV R. 203-204):

> "The Commission, in arriving at the proper rate-base, frankly and openly adopted the Prudent Investment Theory and paid no attention to the present value of the properties of Hope. Mr. Justice Brandeis, in his classic concurring opinion (Mr. Justice Holmes joined in the opinion) in *State of Missouri, ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri*, 262 U. S. 276, has set forth, with his customary incisive clarity, the Prudent Investment Theory, together with the reasons for his belief in that theory. To my mind, the arguments he therein advances have never been convincingly refuted."

The Commission's selection of a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less the depreciation therein was a reasonable exercise of discretion. See also *Driscoll v. Edison Light and Power Company*, 307 U. S. 104, 122-123 (1939) (Mr. Justice Frankfurter concurring); *McCart v. Indianapolis Water Company*, 302 U. S. 419, 441 (1938) (Mr. Justice Black dissenting).

It is respectfully submitted that under the Natural Gas Act, as Justices Black, Douglas and Murphy, concurring, tersely stated in *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 606 (1942):

> "As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value.' The Commission may now adopt, if it chooses, prudent investment as a rate base —the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in

the *Southwestern Bell Telephone* case, there could be no constitutional objection if the Commission adhered to that formula and rejected all others."

**B. The Court of Appeals erred in holding that the Commission's findings of actual legitimate cost, the depreciation therein, the annual allowance for depreciation, and the dry hole as an operating expense of 1941, were not conclusive upon the court, since each of said findings has a rational basis and is supported by substantial evidence.**

In *American Gas and Electric Company v. Securities and Exchange Commission*, 134 F. (2d) 633, 641 (1943) (Rutledge, Associate Justice) (now Mr. Justice Rutledge); cert. den. 63 S. Ct. 1318, 87 L. Ed. 1165 (June 1, 1943), the court said in construing the Public Utility Holding Company Act of 1935:[1]

"* * * The judicial function is exhausted when there is found a rational basis for the conclusions of the Commission after a fair and adequate hearing. (*Rochester Telephone Corp. v. United States*, 1939, 307 U. S. 125, 146, 59 S. Ct. 754, 83 L. Ed. 1147; *Gray v. Powell*, 1941, 314 U. S. 402, 411, 62 S. Ct. 326, 86 L. Ed. 301; *Public Service Corp. of New Jersey v. Securities and Exchange Commission*, 3 Cir., 1942, 129 F. 2d 899, 903.) Although the initial burden is on petitioner to prove to the Commission that its management and policies are not subject to Bond and Share's 'controlling influence,' the Commission's function is to make an adequate and fair appraisal of the weight and credibility of the evidence. (*Detroit Edison Co. v. Securities and Exchange Commission*, 6 Cir., 1941, 119 F. 2d 730, 736; *Pacific Gas & Electric Co. v. Securities and Exchange Commission*, 9 Cir., 1942, 127 F. 2d 378, 382; *Public Service Corp. of New Jersey v. Securities*

[1] Sec. 24(a) 15 U. S. C. Sec. 79x of the Public Utility Holding Company Act of 1935, like Sec. 19(b) of the Natural Gas Act, provides that "the finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive."

*and Exchange Commission*, 3 Cir., 1942, 129 F. 2d 899, 902. The Commission, like other expert agencies dealing with specialized fields, has the function of appraising conflicting and circumstantial evidence and the weight and credibility of testimony. *National Labor Relations Board v. Link-Belt Co.*, 1941, 311 U. S. 584, 597, 61 S. Ct. 358, 85 L. Ed. 368; *Rochester Telephone Corp. v. United States*, 1939, 307 U. S. 125, 146, 59 S. Ct. 754, 83 L. Ed. 1147.)"

**1. The Commission's finding of actual legitimate cost has a rational basis and is supported by substantial evidence.**

It was not irrational for the Commission to adopt after extensive investigation substantially the investment shown by the respondent's books as the actual investment which the owner had made to establish the business, and to reject the respondent's attempt to write up the investment by about $17,000,000 which the evidence showed had already been recouped from the public as a day to day cost of operating the business.

The Commission reasonably adopted the investment substantially as shown by the respondent's books.

The books of a corporation are ordinarily prima facie evidence of the investment which the owners have made. This rule arises from the fact that the investment spread upon the books of a corporation, particularly in the public utility field, is not put there merely as the hobby of an eccentric. The rule arises from the known fact that the books of a corporation, even a subsidiary corporation like the Hope Company, show the investment as a basis of day to day decisions of management, as a basis of reports to tax authorities, as a basis of reports to regulatory commissions, and as a record for the information of the public and its government generally. (I R. 260, 253; II R. 173-175.) The books of a public utility corporation are ordinarily prima facie evidence of the facts set forth therein. *Newton v. Consolidated Gas Company*, 258 U. S. 165, 176 (1922) (Mr. Justice McReynolds).

The extensive investigation of the books and supporting vouchers of the respondent by the Commission's staff confirmed the rule that the respondent's books show prima facie the investment the owner has made in establishing the business. From October of 1938 to February of 1941, the Federal Power Commission's staff conducted an extensive investigation of the books, records, and vouchers of the respondent, after which it concluded that the books correctly show the investment the owner has made to establish the business, except for one accounting error amounting to approximately $1,300,000, which the Commission corrected. (III R. 25-39; I R. 35.) The Commission's conclusion that the investment in the respondent's property devoted to interstate business is substantially that shown by the books (I R. 23) is not merely sustained by the prima facie evidence rule attaching to book figures of a corporation such as respondent; but is also supported by substantial testimony.

The Commission rationally rejected the respondent's attempt to write up the investment by about $17,000,000 which the evidence showed was a cost of the day to day operation of the business which had long since been recouped from the public.

The respondent complains that the Commission did not add to the investment substantially as shown by the books a further sum of approximately $17,000,000 for well drilling expenses prior to 1923, overheads, and miscellaneous items, which the respondent had always hitherto treated as a cost of operating the business. It appears that the Federal Power Commission reasonably rejected this claim and that its conclusion is supported by substantial evidence.

The respondent's management has always treated the items of well drilling expenses prior to 1923, overheads, and other miscellaneous items as day to day costs of operating the business, and not as an investment which the

owner had made in establishing the business. Mr. Joseph C. Chisler, Vice President, Treasurer, director and chief accounting officer of the Hope company, and a responsible member of the management, testified that the items aggregating $17,000,000 previously charged to operating expenses and now sought to be included in the investment, were charged to operating expense accounts either pursuant to a code of accounts or in the exercise of managerial discretion. (II R. 172-173.) Mr. Chisler said that the respondent had an option in respect to the treatment of well construction costs and made an election and charged such costs to operating expense. (II R. 173.) He stated that the accounting officers of the respondent had all been competent men. (II R. 173.) Chisler also testified that the charging of well construction costs to operating expenses from the beginning of operations until 1923 was in accordance with accounting principles followed at that time and which had been followed by oil companies. (II R. 174.) He stated that under federal income tax regulations, the respondent could also elect to treat well construction costs either as operating expense or capital, and that it had elected to treat them as operating expense. (II R. 176.) It is a matter of public record that in 1921 the respondent claimed and the West Virginia Commission held that well drilling expenditures constituted at that time and in that stage of the industry a cost of operating the business and not an investment which the owner had made for the purpose of establishing the business. *Re Hope Natural Gas Company*, P. U. R. 1921 E, 418, 439-440. In fact, down to the very day of the commencement of the present controversy, the responsible managerial and accounting officers of the Hope Natural Gas Company had written these early well drilling costs, overheads, and other miscellaneous items off as operating expense, and it is difficult to understand by what legerdemain these costs of operation have suddenly been transmuted into an owner's investment.

The Commission found that the expensed items had been recouped through revenues from Hope's customers (I R. 28) and this finding is supported by substantial evidence. (I R. 34; III R. 13-14, years 1898-1923.)

The Commission's chief accountant testified that it would be unjust and inequitable to the public to permit this gas company, which has once recouped these operating costs through revenue from rates, now to include those same expenditures in the investment so that the customers must again pay these costs to the utility in the guise of a return of the investment through depreciation and depletion allowances in addition to paying a return upon these past operating expenses for years to come. Mr. Charles W. Smith, Chief of the Bureau of Accounts, Finance and Rates of the Federal Power Commission, and a nationally known authority on public utility accounting (I R. 225-227), testified that it would be unjust and inequitable to the public to permit items previously charged to operating expenses under the allowable discretion of management and without accounting error to be later included in the base upon which customers are required to pay a return and depletion and depreciation allowances. Mr. Smith said (I R. 305-306):

> "Q. If the company were permitted to capitalize retroactively items which it had formerly expensed, in a rate case, would not multiple charges against the consumers result?
>
> (Objection overruled.)
>
> The Witness: It would be purely a question of fact. If they are allowed as expenses and then put in plant and allowed again, of course, there is duplication."

The decided cases hold that once the management without accounting error decides to treat an item as a cost of operation, it remains a cost of operating the business and not an investment that the owners have made for the purpose of establishing the business in spite of later changes in

accounting practice or management election, which can operate only for the future. *Peoples Gas Light and Coke Company v. Slattery*, 373 Ill. 31, 51, 25 N. E. (2d) 482, 493, 31 P. U. R. (N. S.) 193, 207; App. Dismissed 309 U. S. 634; *Los Angeles Gas and Electric Corporation v. Railroad Commission of California*, 58 F. (2d) 256, 260, P. U. R. 1932 C, 397, 404, aff'd. 289 U. S. 287; *Natural Gas Company of West Virginia v. Public Service Commission*, 95 W. Va. 557, 570-572, 121 S. E. 716, 720, P. U. R. 1924 D, 346, 357-361; and see *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 589 (1942).

On behalf of the gas consumers in Cleveland who would ultimately be required to pay higher rates to the affiliated East Ohio Gas Company for the unjust enrichment of the respondent Hope Natural Gas Company if the Federal Power Commission had held otherwise, petitioner respectfully submits that the Federal Power Commission acted properly in rejecting the respondent's attempt to inflate for rate case purposes the investment which its management had long recognized and spread upon its books as the actual investment.

The presumption, supported by testimony of both the respondent's management and the public accounting authorities establishing that the respondent's books substantially show the investment made by the owner, was not overthrown by the testimony of an engineer who undertook to inflate the utility's investment under the guise of reaccounting as capital for items charged to day to day cost of operation in the past. The respondent presented no independent accounting witness to testify that these 17 millions of dollars of intangible well drilling expenditures, overheads, and miscellaneous items are an investment of the owner of the property. Instead, the respondent presented in support of its rate case claim an engineer, who devoted 400 volumes of working papers to the alchemy of transmuting what the management had always treated as

operating expenses into investment for rate case purposes. (Antonelli, Tr. 1425.) But, being an honest man, Mr. Antonelli was finally forced to admit under cross examination by Mr. Slaff of Federal Power Commission counsel that it is improper to capitalize items which have previously been expensed by the respondent, exercising its discretion under a controlling system of accounts. He said (IV R. 326-327):

"By Mr. Slaff:

Q. I see. Then I understand your present testimony to mean that you consider it improper to capitalize items which have previously been expensed by the company exercising its discretion under a controlling system of accounts, is that correct? (Objection overruled.)

• • •

A. Yes, sir.

By Mr. Slaff:

Q. And that applies, of course, not only to the specific account that we were discussing, but throughout?

Mr. Milde: Same objection.

By Mr. Slaff:

Q. I mean, you weren't confining that to a specific account, were you?

Mr. Milde: Same objection.

Trial Examiner: Objection overruled.

A. No, sir."

With that admission by the respondent's witness, the respondent's case for inflating its investment by $17,000,000 of items previously recouped from the public as costs of day to day operation of the business collapsed.

Dobie, Circuit Judge, dissenting below, said on this branch of the case (IV R. 205, 206-207):

"Further, I think that the methods adopted by the Commission under the Prudent Investment Theory, in

arriving at a rate-base in the instant case, were neither fanciful nor arbitrary. It seems to me, too, that there was substantial evidence to support the opposite findings of the Commission.

• • •

The Commission refused to allow as capital the amount of drilling cost which Hope had in the past charged to operating expenses. The Commission found (and I think this finding is supported by the evidence) that these costs had been considered by Hope in fixing its rates in previous years and that these costs had already been paid by the consumers. On this ground, the Commission declined to include these costs in arriving at the rate-base.

It was the practice of Hope, prior to 1923, to charge well-drilling costs to operating expenses rather than to capital account. In so doing, Hope seems to have followed the then general procedure of the natural gas industry. It changed this practice under a requirement of the Public Service Commission of West Virginia. The present system of accounting prescribed by the Federal Power Commission also follows the West Virginia practice. It is my considered opinion that the present procedure is the proper one.

It is to be noted that this is not a mere mathematical error in book-keeping, which of course, should be corrected. It is rather an accounting policy. It does not seem to me to be vital whether the decision of the Commission here is based upon technical estoppel, equity or fair dealing. And once more, I think the Commission should be here sustained. Under its present claim, Hope seeks to impeach its books, which were competently kept for a long period of years under the older method. And Hope itself, in a previous rate case before the Public Service Commission of West Virginia, claimed these well-drilling costs as operating expenses, its contention was allowed, and its rates were fixed accordingly.

The holding of the Commission here is sustained by the great weight of authority. In the Commission's brief, these authorities are set out at great length, and include decisions of federal courts, decisions of state

courts, and decisions of State Utility Commissions. Quite striking here, I think, is an extract from the majority opinion in the recent *Natural Pipe Line* case (315 U. S. at pages 590, 591):

"Here the companies, though unregulated, always treated their entire original investment, together with subsequent additions, as capital on which profit was to be earned. They charged the out-of-pocket cost of maintenance of plant, whether used to capacity or not, as operating expenses deductible from earnings before arriving at net profits. *They have thus treated the items now sought to be capitalized in the rate base as operating expenses to be compensated from earnings, as in the case of regulated companies.* * * * *We cannot say that the Commission has deprived the companies of their property by refusing to permit them to earn for the future a fair return and amortization on the costs of maintenance of initial excess capacity—costs which the companies fail to show have not already been recouped from earnings before computing the substantial "net profits" earned during the first seven years.'* (Italics ours.)"

It is respectfully submitted that the Commission's findings of actual legitimate cost has a rational basis and is supported by substantial evidence.

**2. The Commission's finding as to the depreciation in the actual legitimate cost has a rational basis and is supported by substantial evidence.**

There is no inconsistency between the Commission's method of determining the investment and its method of determining the depreciation in the investment. The Commission adopted substantially the book investment, because it found after extensive investigation, that the books stated the investment without serious accounting error. It rejected the book figures for depreciation in the investment because the Commission's investigation and the testimony of the respondent's witnesses showed that

the book reserve for depreciation was shot through with error, having been built up by charging to operating expenses over the years excessive amounts of annual depreciation. (III R. 176; II R. 399; I R. 40.) Were that not so, as it is, the respondent could hardly be heard to complain, for the Commission's method of determining depreciation in the investment results in depreciating the original investment about $25,000,000 less than if the respondent's own book depreciation accruals had been adopted as the measure of the depreciation in the investment. (I R. 46; I R. 86.)

The Commission's method was apt for the purpose of determining the depreciation in the investment.

The Commission's method for determining depreciation and depletion in the investment pursuant to the Natural Gas Act, Section 6(a) as of December 31, 1940 is explained as follows in the Commission's Opinion (I R. 45):

> "The required depletion and depreciation reserve, as we have determined it upon the record, is the best evidence of the measure of actual existing depletion and depreciation, and it will be deducted from the actual legitimate cost of the Company's property for rate-making. The reserve requirement on any selected date is the total of the annual provisions for depletion and depreciation less the actual retirements of property. The method used here determines the amount required annually to reimburse the Company for property consumed in service, and it results in a correlation of the annual expense and the accumulated reserve. The method is just and consistent for each operating period because the costs utilized are matched with the revenues produced by the property in service."

The economic service life method is a recognized method of determining depreciation in the investment and the annual allowance for depreciation or return of the investment.

The method used by the Commission in this case produces substantially the same result as the method which the Commission used and this Court approved in *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 593-595 (1942). In the *Natural Gas Pipeline Company* case, the Commission employed the sinking fund method of providing for annual amortization or depreciation allowances, and used as the interest attributable to the fund in the calculation the same interest rate as the rate of return. The use of the sinking fund formula with the same rate of interest as the rate of return has substantially the same effect as a straight-line annual allowance coupled with a rate base deduction for depreciation equivalent to the ratio of the expired service life of the property to the total service life of the property. See *Public Utilities Commission of District of Columbia v. Capital Traction Company*, 17 F. (2d) 673, 676 (District of Columbia Court of Appeals); *Re Duluth Street Railway Company*, P. U. R. 1923 D, 705, 737-738 (Wisconsin Commission).

For example, in the *Natural Gas Pipeline* case, the expired service life was approximately one-third of the assumed overall service life. The use of the sinking fund formula by the Federal Power Commission in that case was equivalent to the use of a straight line annual allowance for depreciation in operating expenses coupled with deduction of a depreciation of one-third of the amount of the original investment in the property. Therefore, the use of the sinking fund formula by the Commission in the *Natural Gas Pipeline Company* case was similar to what the Commission did in the instant case, where the Commission made a straight line annual allowance in operating expenses, while at the same time deducting from the original investment depreciation in proportion to the relation that the expired service life bears to the total service life, or about 43 per cent. The decision of this Court affirming

the Federal Power Commission's decision in the *Natural Gas Pipeline* case is therefore a square precedent for affirmance in the instant case.

Both methods harmonize the deduction for depreciation in the investment, express or implied, with the annual allowance for depreciation in the investment. The fact that the Commission used the sinking fund formula instead of the straight line method in the *Natural Gas Pipeline* case should not obscure the fact that this Court's affirmance in the *Natural Gas Pipeline* case applies with equal force to the deduction of the reserve requirement from the original investment where, as here, an annual allowance based on the straight line method is made. This Court said in the *Natural Gas Pipeline* case that "The companies are not deprived of property by a requirement that they credit in the amortization account so much of the earnings received during the prior period as are appropriately allocable to it for amortization." (315 U. S. 575, 595.) So here, the respondent is not deprived of property by the finding of the Commission that a proper depreciation in the investment is that proportion of the investment which the expired service life bears to the total service life.

The Commission's finding of depreciation was supported by substantial evidence.

In arriving at its determination of the depreciation in the investment in the instant case, the Commission properly relied on its engineers to determine the ultimate composite service life of the investment. (III R. 151.) And it properly relied upon its accountants to determine how much of the ultimate service life of the investment had already been used up in the public service. (III R. 175.)

The lower court erroneously stated that in determining the actual existing or accrued depletion and depreciation the Commission failed to take into account "the present condition of the property." (Majority Opinion, IV R. 189.) In making these determinations the Commission was in

fact guided by a study conducted by a qualified staff engineer, who made a field inspection of the Company's physical properties to aid in the determination of service lives. (I R. 42; III R. 157-158.)

The Commission's straight-line service-life method of determining depreciation in the investment represents its judgment as an experienced administrative body as to the consumption of capital, on a cost basis, according to the method which spreads the loss over the respective service periods. See *Lindheimer v. Illinois Bell Telephone Company*, 292 U. S. 151, 169 (1934).

The majority below complained that the net investment in certain accounts found by the Commission is less than gross salvage value. (IV R. 189.)

In the first place, it is wholly improper to compare the net investment found by the Commission for these accounts with the alleged gross salvage value. Any proper comparison should be with the net salvage value. The negative salvage, i.e., the cost of removal or abandonment and delivery for sale of certain items of utility property may be and sometimes is greater than the gross salvage value, or what the item could be sold for. The respondent's witness Rhodes himself used net salvage value in arriving at his estimated claimed net value of the property. (II R. 422.) The unfairness and gross impropriety of comparing the Commission's net investment of well equipment, for example, with the gross salvage value of well equipment is emphasized by the fact that the respondent's witness Rhodes estimated a lower net value for well equipment than his gross salvage value of 65 per cent, to wit 56 per cent. (I R. 369.)

Finally, Hope's claimed "gross salvage" percentages do not represent the ultimate salvage from retirements of equipment at the end of its useful life, but are inflated by the inclusion of so-called warehouse recoveries which are transfers of reusable equipment from plant to the ware-

house at full book cost. Respondent's witness Rhodes recognized this fact and, in determining the gross salvage of gas well equipment, made an adjustment purporting to correct for it, although he merely estimated, from some inspection, that reuseable gas well equipment returned to the warehouse had depreciated 12 per cent and, instead of eliminating from the calculation the equipment that was to be reused, he merely made a minor reduction. (I R. 469-470.) The effect of the inclusion of reuseable equipment in the calculation of per cent salvage is demonstrated by a comparison of the gross salvage from gas well equipment that could no longer be used or was abandoned of about 33 per cent (11 per cent salvage from 34 per cent of equipment, I R. 469-470) with the 65 per cent determined by including reuseable equipment, even though the minor adjustment for observed depreciation in the reuseable equipment had been made. In comparing the Commission's net investment in field line and compressor station equipment with the alleged gross salvage figures, the respondent makes no adjustment even for the depreciated condition of reuseable equipment. (I R. 470-471.)

The respondent's attempted comparison of the Commission's *net* investment in well equipment, field line pipe, and compressor station equipment with the claimed *gross* salvage value of these items, which apparently impressed the majority below, is wholly meaningless.

It is respectfully submitted that the method used by the Commission was apt for the purpose of determining the depreciation in the investment, and that the Commission's finding of depreciation was supported by substantial evidence.

After carefully examining the record, Dobie, Circuit Judge, dissenting in the court below, said on this branch of the case (IV R. 205):

> "In computing depreciation and depletion, the Commission employed the Economic Life Service Method.

This formula has long been known to, and has been frequently applied by, economists and accountants. It seems to have been often used in connection with depreciation under the federal income tax. I cannot find in this formula any active germs of constitutional invalidity, as it is applied to the instant case.

"The Commission based its determination of existing depletion and depreciation upon actual legitimate cost of the properties of Hope. An apparently competent engineer inspected this property to obtain information that would serve as a guide for estimating the property's service life and the amount of money required annually to reimburse Hope for so much of this property as might be consumed in rendering service to the public.

"Incidentally, the amount deducted by the Commission fell short by many millions of dollars of the amount accrued and set up by Hope for depreciation and depletion. In his partially dissenting opinion Commissioner Scott expressed the view that the Commission had been, in fixing the amount for depreciation and depletion, far too lenient with Hope.

"Again I feel that there was substantial evidence to sustain the Commission's findings under a formula which was neither unrealistic nor capricious."

It is respectfully submitted that the Commission's finding as to the depreciation in the actual legitimate cost has a rational basis and is supported by substantial evidence.

### 3. The Commission's finding as to the annual allowance for depreciation has a rational basis and is supported by substantial evidence.

Here the question is whether in a wasting asset business annual allowances for depreciation and depletion may be based upon investment rather than upon reproduction cost. That question has quite recently been decided in favor of the investment base as against the reproduction cost

base by this Court. *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 593 (1942). In a wasting asset business, any scheme of depreciation allowance which will restore the capital investment by the end of its useful life involves no injustice. The Commission's annual allowance for depreciation restores from current earnings the amount of service capacity of the investment consumed in each year, which is reasonable. See *Lindheimer v. Illinois Bell Telephone Company*, 292 U. S. 151, 167. Had the Commission allowed depreciation and depletion on the theoretical reproduction cost of well drilling expenses, overheads and other intangible items previously recovered as operational costs, items in which the owners have made no investment, as the court below held it should have done, the depreciation and depletion allowance would not be the computation of a proper expense, but instead the allowance of additional profit over and above a fair return.

The respondent complained that "by omitting 2600 wells and thousands of other property items actually in service from its 'adjusted book cost' the Commission treats them as nonexistent or in zero per cent condition" and makes no allowance therefor by way of annual depletion. (IV R. 25.) Of course, the Commission did not omit 2600 wells from the investment. Its determination of the investment includes the investment in materials in all the 3300 wells of the respondent. The investment does not include well drilling expenses for certain of the wells because the respondent prior to 1923 elected to treat drilling expenses as costs of operating the business and recovered those costs currently from the public through revenues. The Commission properly did not allow any depletion on the drilling expenses for these wells, because the owner has made no investment in these drilling expenses for the purpose of establishing the business.

It is respectfully submitted that the Commission's finding as to the annual allowance for depreciation has a rational basis and is supported by substantial evidence.

**4. The Commission's finding that the deep test dry hole is an operating expense in 1941, when it was booked, has a rational basis and is supported by substantial evidence, and even if there were error on the part of the Commission in not treating the said dry hole as an operating expense of 1940, the error is harmless.**

The lower court approved the respondent's claim for an increase in the Commission's allowance for exploration and development costs upon the ground that it should be allowed $165,000 more for dry hole expense than the books showed it spent in 1940. (IV R. 198.) As a matter of fact, the Commission in fixing future rates allowed the respondent $192,000 more for exploration and development expense than the books showed it actually spent in 1940 without making any allowance for the known upward trend in gross sales and revenues. (I R. 70.) But laying to one side the fact that the respondent's claim for dry hole expense is academic so far as the reasonableness of the Commission's rate order is concerned, the lower court's suggestion that dry hole expense booked in 1941 should be treated as a 1940 expense because the money was spent in that year is wholly impractical and unreasonable. (IV R. 198.) Upon the lower court's theory, many expense items booked in 1940 would have to be treated as expenses of 1939 when the money was spent, and many expenses booked in 1939 would have to be treated as operating expenses of 1938 when the money was spent, and this would force a complete reaccounting of the book operating expenses back through the years with no proof that such a reaccounting would produce overall any substantial change in the allowable operating expenses for 1940. This the Commission was not required to do. The Commission's

finding as to dry hole expense has a rational basis and is supported by substantial evidence.

It is respectfully submitted that the Court of Appeals erred in holding that the Commission's findings of actual legitimate cost, the depreciation therein, the annual allowance for depreciation, and the dry hole as an operating expense of 1941, were not conclusive upon the court since each of said findings has a rational basis and is supported by substantial evidence.

Since the Court of Appeals erred in holding that for rate-making purposes under the Natural Gas Act, the Commission is not authorized to use a rate base determined exclusively upon the basis of "prudent investment" measured by actual legitimate cost less depreciation, but that it must use a rate base which reflects estimates of the extent and effect of post investment fluctuations in labor and material prices, and since the Court of Appeals erred in holding that the Commission's findings of actual legitimate cost, the depreciation therein, the annual allowance for depreciation, and the dry hole as an operating expense of 1941, were not conclusive upon the court since each of said findings has a rational basis and is supported by substantial evidence, therefore it is respectfully submitted that the Court of Appeals erred in setting aside the Federal Power Commission's "Order Reducing Rates," for the reason that said order is authorized by the Natural Gas Act, and is based upon findings which have a rational basis and are supported by substantial evidence.

## III.

**EVEN IF THERE WERE A CONSTITUTIONAL QUESTION INVOLVED, AS THERE IS NOT, THE COURT OF APPEALS FURTHER ERRED IN SETTING ASIDE THE FEDERAL POWER COMMISSION'S "ORDER REDUCING RATES" FOR THE REASON THAT IN THE ABSENCE OF AN EXERCISE OF THE POWER OF EMINENT DOMAIN OR OTHER DIRECT APPROPRIATION OF PROPERTY FOR THE USE OF THE UNITED STATES GOVERNMENT, RESPONDENT WAS NOT ENTITLED UNDER THE FIFTH AMENDMENT TO ANYTHING MORE THAN DUE PROCESS OF LAW.**

The Commission's "Order Reducing Rates" was made within the ambit of the Commission's statutory authority. A fair hearing was given. Proper findings were made. Nothing arbitrary was done by the Commission. Respondent was accorded due process of law.

Upon these facts, the court below plainly erred in holding that the Commission's "Order Reducing Rates" results in confiscation of respondent's property contrary to the Fifth Amendment because it does not purport to give respondent a return upon the "present value" of respondent's physical property, in addition to due process of law.

The clause of the Fifth Amendment which forbids a taking of private property for public use without just compensation applies where the Federal Government attempts to exercise the power of eminent domain or otherwise makes a direct appropriation of private property for the use of the Government, *Pumpelly v. Green Bay Canal Company*, 13 Wall. 166 (1871); *United States v. Lynah*, 188 U. S. 444 (1902); *United States v. Cress*, 243 U. S. 316 (1916); *Jacobs v. United States*, 290 U. S. 13 (1933), but does not apply where, as here, there is a mere regulation of the use of the property under the Commerce clause or other granted power for the protection and promotion of the welfare of the economy. *Legal Tender Cases*, 12 Wall. 457, 551 (1872) (Mr. Justice Strong); *Morrisdale Coal Co.*

*v. United States*, 259 U. S. 188, 190 (1922) (Mr. Justice Holmes); see *Henderson v. Bryan*, 46 F. Supp. 682, 685 (S. D. Cal.) (1942) (Harrison, *J.*).

The clause of the Fifth Amendment which forbids deprivation of property of any person without due process of law does not forbid all deprivation of property, which would destroy the power to regulate, but only forbids a deprivation of property without due process of law. *United States v. Darby*, 312 U. S. 100, 125-126 (1941) (Mr. Justice Stone); *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 586 (1942) (Mr. Chief Justice Stone); and see *North American Company v. Securities and Exchange Commission*, 133 F. (2d) 148, 154 (C. C. A. 2) (1943) (Swan, *J.*); Cf. *Driscoll v. Edison Light and Power Company*, 307 U. S. 104, 122 (1939). (Mr. Justice Frankfurter, concurring.)

Regulation of the rates of a natural gas company under the commerce power is not the same as condemning private property for public use without paying just compensation. If regulation of natural gas rates under the commerce power were to be construed as a taking of private property for public use within the meaning of the Fifth Amendment, there would be an implied contract on the part of the Federal Government to pay to the respondent the value of the property so appropriated for public use. *United States v. Lynah*, 188 U. S. 445, 464-465 (1903); *Henderson v. Bryan*, 46 F. Supp. 682, 685 (D. C. Cal.) (1942). It may be conceded that when the Federal Power Commission's order was made, upon a date several months after Pearl Harbor, the Federal Government had a right, as it still has, to requisition respondent's property, the use of respondent's property, or respondent's product for public use for the war purpose of combating inflation or for any other war purpose. Constitution of the United States, Article I, Sec. 8, cl. 11-16, Article II; Second War Powers Act, 1942 (effective March 27, 1942), Title II, 56 Stat. 177, 50 U. S. C. A. App. Sec. 632; Executive Order No. 9328,

par. 4, 8 F. R. 4681 (April 8, 1943); *Highland v. Russell Car Company*, 279 U. S. 253, 261-262 (1929) (Mr. Justice Butler); see Franklin, War Powers of the President, 17 *Tulane L. R.* 217 (1942). "But a liability in any case is not to be imposed upon a government without clear words." See *Pine Hill Coal Company, Inc. v. United States*, 259 U. S. 191, 196 (1922) (Mr. Justice Holmes). And the clause of the Fifth Amendment which requires just compensation for a taking of private property for public use simply does not apply to a regulation of the use of property under the commerce clause for the general welfare, such as the Natural Gas Act, or an order made pursuant thereto.

In cases involving federal regulations of the use of property under the commerce power, the Fifth Amendment guarantees only due process of law, and does not provide for a return on or of the present or condemnation value of the physical property, in addition to due process of law.

That is what we understand this Court to have meant in *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 586 (Mr. Chief Justice Stone), where the Court said:

> "The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. If the Commission's order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end."

And that is what the concurring justices apparently understood the decision of this Court to mean in *Federal*

*Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575 (1942), (Justices Black, Douglas and Murphy, concurring, at page 606), when they said:

> "As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost or of giving any weight to that element of 'fair value.' The Commission may now adopt, if it chooses, prudent investment as a rate base—the base long advocated by Mr. Justice Brandeis. And for the reasons stated by Mr. Justice Brandeis in the *Southwestern Bell Telephone* case, there could be no constitutional objection if the Commission adhered to that formula and rejected all others."

It is respectfully submitted that even if there were a constitutional question involved, as there is not, the Court of Appeals further erred in setting aside the Federal Power Commission's "Order Reducing Rates" for the reason that in the absence of an exercise of the power of eminent domain or other direct appropriation of property for the use of the United States Government, respondent was not entitled under the Fifth Amendment to anything more than due process of law.

## IV.

**THE COURT OF APPEALS ERRED IN HOLDING THAT THE FEDERAL POWER COMMISSION HAS NO JURISDICTION TO DETERMINE THE LAWFUL RATES FOR INTERSTATE SALES OF NATURAL GAS AT WHOLESALE AFTER THE EFFECTIVE DATE OF THE NATURAL GAS ACT OF 1938 AND PRIOR TO THE ISSUANCE OF A COMMISSION RATE-FIXING ORDER, FOR THE REASON THAT SAID JURISDICTION IS IMPLIED FROM EXPRESSLY GRANTED POWERS, AND IS SUPPORTED BY THE LEGISLATIVE HISTORY OF THE STATUTE.**

The Federal Power Commission's ultimate "Findings as to Lawfulness of Past Rates" are (I R. 12-13):

> "(23) Cost, conditions and characteristics of service show that the just, reasonable and lawful rates for natural gas sold by Hope Natural Gas Company in interstate commerce to The East Ohio Gas Company for resale for ultimate public consumption were those required to produce compensation in the amount of $11,528,608 for 1939, $11,507,185 for 1940, and $11,910,947 annually since 1940;
>
> "(24) The rates charged and received by the Hope Natural Gas Company for the transportation and sale of natural gas in interstate commerce to The East Ohio Gas Company for resale for ultimate public consumption were unjust, unreasonable, excessive, and therefore unlawful to the extent of $830,892 during 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940."

In support of its jurisdiction to make these findings, the Commission said in its opinion (I R. 67-69):

> "In 1938 the Cities of Cleveland and Akron, Ohio, filed complaints with the Federal Power Commission alleging that the rate which Hope charged East Ohio Gas Company was unjust, unreasonable and unlawful. These complaints were registered before Hope filed its five interstate wholesale rate schedules which are involved in these proceedings. The acceptance of a rate schedule for filing does not mean that the Com-

mission approves it, and does not establish the justness or reasonableness of the rate. *Re Home Gas Co.*, 39 P. U. R. (N. S.) 102, 109. On October 14, 1938, this Commission instituted an investigation of the reasonableness of all of Hope's interstate rates. If it had been possible to adduce the volume of evidence required for the disposition of such a complex matter within a few months, the Commission would have prescribed the reasonable interstate wholesale rates for 1939 and subsequent years. The City of Cleveland raised the issue of the lawfulness of the rate charged by Hope to the East Ohio Gas Company and asked this Commission as an aid to State regulation, to make a separate determination of the reasonable rates since June 30, 1939. Originally the City of Cleveland requested this Commission to find the lawful Hope-East Ohio rates since June 21, 1938, but it now represents that the subject is idle for rates prior to June 30, 1939, because those rates which Cleveland consumers were obligated to pay East Ohio have been settled. The Commission does not have the authority to fix rates for the past and to award reparations. But Congress did empower and instruct the Commission in Section 5(a) of the Natural Gas Act to fix future rates, and as a step in that process we must necessarily consider the reasonableness of past and existing rates. When the issue is raised and the public interest will be served, we consider as a necessary part of that duty the power to examine the entire rate problem involved and to determine what rates were lawful in the past. Also, Section 14(a) of the Act authorizes the Commission to investigate any facts which it finds necessary in order to determine whether Hope has violated any provision of the Natural Gas Act. Furthermore, the Commission has power to perform any act, pursuant to Section 16, which is necessary or appropriate to carry out the provisions of the Act. Under Section 4(a) of the Act any interstate wholesale rate that is not just and reasonable is unlawful. *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U. S. ..... Hope's rate collected from East Ohio Gas Company was lawful after June 21, 1938, the effective date of the Act, only to the extent that it was just and reason-

able. The City of Cleveland states that the Ohio Commission is investigating the reasonableness of the East Ohio Gas Company's bonded retail rates in Cleveland for the period since June 30, 1939, and that the lawfulness of Hope's rate is an important factor in the case. Since the enactment of the 1938 Natural Gas Act this Commission has had exclusive jurisdiction to determine the lawfulness of the interstate wholesale rates charged by Hope and other natural gas companies. (Sections 1, 2, 4 and 5(a). See *Missouri v. Kansas Natural Gas Co.*, 265 U. S. 298, 308; *Illinois Natural Gas Co. v. Central Illinois Public Service Co.*, 314 U. S. 498, 506; *Kentucky Nat. Gas Corp. v. P. S. C.*, 28 F. Supp. 509, 513, aff. 119 Fed. (2d) 417.)

"In response to the request of the City of Cleveland, the Commission will make the appropriate findings of fact as to the lawfulness of the rates charged East Ohio by Hope since June 30, 1939. The Interstate Commerce Commission has furnished precedents for the performance of this public duty. (*W. A. Barrows Porcelain Enamel Co. v. Cushman Motor Delivery Co.*, 11 M. C. C. 365, 366; *Dixie Mercerizing Co. v. ET & WNC Motor Transp. Co.*, 21 M. C. C. 491, 492. See: *United States v. Morgan*, 307 U. S. 183, 313 U. S. 409; *Lima Tel. Co. v. P. U. C.*, 98 O. S. 110, 120 N. E. 330.) Congress intended that this Commission cooperate with State Commissions and municipalities, and the provisions of Sections 5(b) and 17 are special evidence of such intent."

The court below held that the Federal Power Commission has no jurisdiction to determine upon complaint of a municipality and upon its own investigation that a natural gas company has violated Section 4(a) of the Natural Gas Act by charging an unjust, unreasonable and therefore unlawful initial rate, and to determine the lawful rate for a period after the passage of the Natural Gas Act and prior to a Commission order fixing future rates. (IV R. 200-202.)

This raises the question whether the Commission has jurisdiction to determine the *lawful* rates for interstate

sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of an initial Commission rate-fixing order.

This question is of substantial importance to petitioner, the City of Cleveland, because the Federal Power Commission's "Findings as to Lawfulness of Past Rates," if valid, considered apart from the Commission's "Order Reducing Rates," furnish an appropriate basis for refunds to Cleveland consumers of temporary rates collected under bond by respondent's affiliate, The East Ohio Gas Company, in pending proceedings before The Public Utilities Commission of Ohio (*East Ohio Gas Company v. City of Cleveland*, P. U. C. O. Nos. 11,001, 11,218, 11,442), of $3,600,000 or an average of about $13 per customer from June 30, 1939 to June 30, 1942.

Conversely, the holding of the Court below that initial filed rates of a natural gas company are the only lawful rates until changed by a future rate-fixing order of the Federal Power Commission, unless reversed by this Court, would become *res judicata* between Cleveland and The East Ohio Gas Company as a privy of Hope, cf. *Sunshine Coal Company v. Adkins*, 310 U. S. 381, 389-391, 401-404 (1940) and in that event, the $3,600,000 would permanently inure to the benefit of the Standard Oil Company (New Jersey), which is the sole owner of both Hope and East Ohio.

**A. The jurisdiction of the Commission to determine LAWFUL rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order is implied from the expressly granted power to determine upon complaint of a municipality and upon the Commission's own investigation that the act has been violated by charging an unlawful rate and by not charging a lawful rate.**

Under Section 4(a) of the Natural Gas Act, it is a violation of the Act to charge an unlawful rate, and it is a

further violation of the Act not to charge a lawful rate. Section 4(a) provides that (15 U. S. C. A. Sec. 717c (a)):

> "(a) All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful."

Section 13 of the Natural Gas Act authorizes the filing of complaints by "any State, municipality, or State commission complaining of anything done or omitted to be done in contravention of the provisions of this chapter." (*Supra*, p. 4.)

Section 14(a) of the Natural Gas Act provides that "the commission may investigate any facts * * * which it may find necessary * * * to determine whether any person has violated * * * any provision of this act * * *" and further provides that "the commission * * * may publish * * * and make available to State commissions and municipalities, information concerning any such matter." (*Supra*, p. 5.)

Section 16 of the Act provides that "the commission shall have power to perform any and all acts * * * as it may find necessary or appropriate to carry out the provisions of this chapter." (*Supra*, p. 5.)

In short, it is an express violation of the Act to charge an unjust, unreasonable and unlawful rate and not to charge a just, reasonable and lawful rate. The City of Cleveland was expressly authorized to complain, as it did, that the respondent, Hope Natural Gas Company, had charged an unlawful rate and had not charged a lawful rate in contravention of the provisions of the Act. The Commission was expressly authorized to investigate and to determine whether Hope had violated any provision of the Act, and to publish and make available to the City of Cleveland and The Public Utilities Commission

of Ohio information as to whether Hope had violated the Act by charging an unlawful rate and by not charging a lawful rate. In addition, the Act expressly gave to the Commission blanket authority "to perform any and all acts * * * as it may find necessary or appropriate to carry out the provisions of this chapter."

From the expressly granted power to determine upon complaint of a municipality and upon its own investigation that the Act has been violated by charging an unlawful rate and by not charging a lawful rate, the jurisdiction of the Commission to determine a lawful rate for the immediate past is necessarily implied.[1]

How could the Commission determine that the Act had been violated either by charging an unjust, unreasonable and unlawful rate or by not charging a just, reasonable or lawful rate, unless it could first determine a lawful rate?

The court below did not agree that under Section 4(a) it is an express violation of the Act to charge an unreasonable rate and not to charge a reasonable rate. The lower court took the view that "when rates were filed with the Commission pursuant to Section 4(c) of the Act they became the only lawful rates which the utility could charge or accept." (IV R. 202.) The majority below brushed aside the contention that "the legal rate was not made by the statute a lawful rate—it was lawful only if it was reasonable," upon the ground that the Natural Gas Act gives the Federal Power Commission no authority to award reparation. (IV R. 202.) There was no occasion for Congress to authorize the Federal Power Commission to award

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[1] A determination of lawful rates for a period between the filing of the complaint and an initial Commission rate-fixing order, when not accompanied by any retroactive rate-fixing order, is, like an ascertainment of original cost and net investment under the Federal Water Power Act, an administrative matter, and not an exercise of judicial power. See *Clarion River Power Company v. Smith*, 59 F. (2d) 861 (1932) (C. C. A., D. C.); Cert. Den. 287 U. S. 639.

reparation to the ultimate consumers of gas—for whose ultimate benefit the Natural Gas Act was passed, see *Mississippi River Fuel Corporation v. Federal Power Commission*, 121 F. (2d) 159, 164 (1941) (Gardner, Circuit Judge) —because the award of reparation or refunds to ultimate consumers, like the fixing of future rates for ultimate consumers at burner tip, was left in the hands of the state commissions. As the opinion of the majority below stated, "It is to be noted that in the passage of the Public Utility Act of 1935, upon which the Natural Gas Act is modeled, provisions giving the Commission power to investigate single rates and issue reparation orders, originally incorporated in the bill, were stricken out, the Senate Committee saying in its report: 'They are appropriate sections for a state utility law, but the committee does not consider them applicable to one governing merely wholesale transactions'." (IV R. 201.) But the occasion for determining a lawful interstate rate different from a filed schedule rate for the immediate past is not confined to reparation cases. It also exists where, as here, the purpose of the Federal Act is to complement state regulation, see Natural Gas Act Section 1; *Public Utilities Commission of Ohio v. United Fuel Gas Company*, 317 U. S. 456 (1943) (Mr. Justice Frankfurter), and where the state regulatory bodies or courts may award reparation or order refunds on the basis of the Federal Commission's determinations. e.g. Ohio General Code Sections 614-44 to 614-47; Pennsylvania Public Service Commission Act, Article 5, Section 5, Public Utilities and Carriers Service, Pennsylvania Volume, Section 112, page 170. *State ex rel. The City of Cleveland v. The Court of Appeals for the Eighth District*, 104 O. S. 96, 108-109 (1922).

The holding of the court below that the Federal Power Commission was not impliedly authorized to determine the lawful rate for the immediate past as an incident to the

expressly granted power to determine whether the Act had been violated by charging an unlawful rate and by not charging a lawful rate, is in conflict with the decision of this Court in *Atlantic Coast Line Railroad Company v. Florida*, 295 U. S. 301, 312 (1935) (Mr. Justice Cardozo) where the court said:

> "* * * Unjust discrimination against interstate commerce, 'forbidden' by the statute, and there 'declared to be unlawful,' (Interstate Commerce Act, Sec. 13(4); *Board of Railroad Commissioners v. Great Northern Ry. Co., supra,* at pp. 425, 430; *Florida v. United States*, 292 U. S. 1, 5) does not lose its unjust quality because the evil is without a remedy until the Commission shall have spoken. The word when it goes forth invested with the forms of law may fix the consequences to be attributed to the conduct of the carrier in reliance upon an earlier word, defectively pronounced, but aimed at the self-same evil, there from the beginning. The Commission was without power to give reparation for the injustice of the past, but it was not without power to inquire whether injustice had been done and to make report accordingly. * * *"

It is respectfully submitted that the jurisdiction of the Commission to determine lawful rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order is implied from the expressly granted power to determine upon complaint of a municipality and upon its own investigation that the Act has been violated by charging an unlawful rate and by not charging a lawful rate.

**B. The power to determine a reasonable and lawful rate for a reasonable period antedating the Commission's first order fixing rates for the future is implied from the expressly granted power to fix reasonable future rates.**

Under the authority conferred upon the Commission by Section 5(a) of the Natural Gas Act to fix rates for the

future (*Supra*, p. 3), the Commission was free to determine a reasonable rate for the period antedating its order. As a step in the process of fixing future rates, the Commission was authorized to consider and determine what rates were reasonable in the immediate past. This power to consider and determine what rates were reasonable in the immediate past, the Commission invoked in making its order fixing rates for the future. (I R. 68.) This Court has held under the section of the Packers and Stockyards Act, which is identical with Section 5(a) of the Natural Gas Act, that the administrative officer was free to determine the reasonable rate for the period antedating his initial order fixing rates for the future, for the purpose of making his order fixing rates for the future. In *United States v. Morgan*, 307 U. S. 183, 191 (1939) (Mr. Justice Stone), this Court said:

> "Assuming, as appellees contend, that after the Secretary's order of June, 1933, was set aside he could, in the reopened proceeding, neither promulgate a rate order as of that date nor make an order for the payment of money, he was still not without authority in the premises under the statute and the mandate of this Court. He was free to make an order fixing rates for the future, and for that purpose or any other within the purview of the Act he is now free to determine a reasonable rate for the period antedating any order he may now make. See *Atlantic Coast Line R. Co. v. Florida*, 295 U. S. 301, 312. * * *"

The power to determine a reasonable rate for a period antedating the Commission's first order fixing rates for the future is the power to determine a lawful rate. Not only does Section 4(a) of the Natural Gas Act expressly declare to be "unlawful" any rate that is not just and reasonable, but it mandatorily requires that "all rates * * * shall be just and reasonable." Section 4(e), when read together with Section 4(a), therefore imposes upon the natural gas company the affirmative duty of initially filing only a just and reasonable rate. The opposite interpreta-

tion adopted by the court below would have permitted the natural gas companies throughout the country to file initial rates of $1 per thousand cubic feet, or other ridiculous amounts, and then keep such rates in effect while defying the Federal Power Commission, with its limited staff, to determine and fix just and reasonable rates to be effective only after many years. Hence, a filed initial rate is lawful only if it is just and reasonable. "In other words," as Mr. Justice Roberts said in *Arizona Grocery Co. v. Atchison Ry.*, 284 U. S. 370, 384 (1932), "the legal rate was not made by statute a lawful rate—it was lawful only if it was reasonable." And the power to determine a just and reasonable rate for the period immediately antedating the Commission's first order fixing rates for the future is therefore the power to determine a lawful rate for such period.

It is respectfully submitted that the power to determine a reasonable and lawful rate for a reasonable period antedating the Commission's first order fixing rates for the future is implied from the expressly granted power to fix reasonable future rates.

**C. The holding of the Court of Appeals that the Federal Power Commission is without jurisdiction to determine lawful rates for a period subsequent to the passage of the Natural Gas Act and prior to an initial rate-fixing order thwarts and defeats the intent and purpose of the Congress.**

The intent and purpose of the Congress was to stop the impairment of state regulation, including retroactive state regulation, arising from the influx of natural gas into the state of ultimate consumption at unjust and unreasonable rates primarily fixed by a holding company usually owning both the purchasing and selling subsidiaries.

The legislative history of the Natural Gas Act of 1938 and of the Public Utility Act of 1935, from which it stems,

show that Congress regarded the charging of unjust and unreasonable interstate rates between subsidiaries of the same holding company as a serious evil.

Senator Wheeler of Montana, Chairman of the Senate Committee on Interstate and Foreign Commerce, who had charge of the Holding Company Bill, S. 2796, commonly known as the Wheeler-Rayburn Bill, on the floor of the Senate explained (79 Congressional Record, Part 8, page 8383, May 29, 1935):

> "* * * It (the Federal Trade Commission investigation) uncovered the practices of the holding companies which cannot be characterized in any other way, I submit without fear of contradiction, than as fraudulent and legalized thievery against the people of the United States."

One of the counts in the Federal Trade Commission's indictment of the holding company referred to in the foregoing statement by Senator Wheeler was (79 Cong. Rec., Part 8, p. 8384):

> "(11) Deceptive or illusory methods of dividing or pretending to divide earnings or profits."

In the Congressional hearings on the Natural Gas Bill, the Solicitor for the Federal Power Commission testified that the greatest handicap of the state commissions in protecting the rate payer had been the growth of the holding company, the expansion of these utilities beyond state lines, and the failure of the Federal Government to help solve the problem. (Devane, Hearings H. R. 5423, 74th Cong. 1st Sess., Part 1, p. 498.)

The final report of the Trade Commission on the natural gas industry, one of the documents specifically referred to in Section 1(a) of the Natural Gas Act, concluded (Senate Document 92, Part 84-A, 70th Congress, First Session, p. 611):

> "Twenty-two holding company groups are engaged in interstate transportation of natural gas.
>
> "In 1934 *eight holding company groups* controlled about one-fourth of the supply of natural gas, and they

*controlled approximately four-fifths of all natural gas moved in interstate commerce."*

Mr. Ralph Gallagher of the Standard Oil Company (New Jersey) testified that purchase from affiliates is the situation in most large gas consuming states. (Gallagher, Hearings H. R. 11662, 74th Cong. 2nd Sess., p. 144.)

Judge Benton, Solicitor for the National Association of Railroad and Utility Commissioners, testified (Hearings S. 1725, 74th Cong. 1st Sess., April 16 to 29, 1935, p. 757):

> "Where an operating public utility buys at arm's length from a producing company, it will buy as cheaply as it can. It may be compelled to pay an unreasonable price, but it will not pay more than it has to pay, but when it is under the control of a holding company it pays what it is told to pay."

The state commissions, standing alone, were frankly at a loss to prevent the spread through the holding company set-up of the evil of unreasonable rates for natural gas sold in interstate commerce at wholesale to burner tip in the state of destination. Representatives of municipalities and state commissions were practically unanimous in testifying that the right of state commissions recognized by this Court in *Dayton Power and Light Company v. Public Utilities Commission of Ohio*, 292 U. S. 290, 297 (1934) to inquire into the reasonableness of intercorporate transactions arrived at without arm's length bargaining and to disallow as operating expenses payments made in excess of the reasonable price, was inadequate as a remedy. They said this state right was inadequate because of insufficient funds, lack of power of subpoena running throughout the land, disparity of allowances approved in different jurisdictions, lack of control by the state commission in the state of distribution over the accounts of the producing affiliate in another state, and for other reasons. (Benton, Hearings H. R. 11662, 74th Cong. 2nd Sess., pp. 88-90.

95-98; Devane, Hearings H. R. 11662, 74th Cong. 2nd Sess., p. 153; Hoch, Hearings H. R. 11662, 74th Cong. 2nd Sess., p. 159; Reed, Hearings S. 1725, 74th Cong. 1st Sess., April 16 to 29, 1935, p. 698; Benton, Hearings 1725, 74th Cong. 1st Sess., April 16 to 29, 1935, p. 757; Smith, Hearings H. R. 5423, 74th Cong. 1st Sess., February, March, 1935, Part 1, p. 83; Benton, Hearings H. R. 5423, 74th Cong. 1st Sess., Part 3, p. 1654; see also *Elsbree, Interstate Transmission of Electric Power* (1931) (Harvard University Press), p. 119.)

In the debates on the Natural Gas Act, Senator Wheeler of Montana who had charge of the bill on the floor of the Senate as Chairman of the Committee on Interstate and Foreign Commerce, stated in response to a question from Senator Bulkley of Ohio (81 Cong. Rec. 75th Congress, First Session, Part 8, p. 9315):

"Mr. Bulkley: Mr. President, will the Senator explain just how this bill will improve the situation outlined by the Senator from Indiana (Mr. Minton)? That is the situation that we have in Ohio, and I am very much interested in it.

"Mr. Wheeler: It will improve the situation in this way: The Federal Power Commission will have power to regulate the price of gas shipped and sold at wholesale in interstate commerce, and so they will investigate and find out what is a fair price for it. The Senator's city of Cleveland, and other cities in Ohio, are helpless.

"Mr. Bulkley: The city of Cleveland uses gas imported from West Virginia; and the company which distributes the gas buys it in West Virginia from another corporation that is owned by the same people. How can we get around that?

"Mr. Wheeler: Simply because of the fact that under the bill, if the gas is shipped in interstate commerce, the Federal Power Commission has the right to investigate and say whether or not the company which ships it charges a fair rate for the wholesale

gas which it is selling to the city of Columbus or the city of Cleveland. At present that cannot be done. No one can say whether the price charged is a fair price, or whether it is a high price, or whether the city of Cleveland or the city of Columbus is being robbed. When efforts are made to get that information they are blocked by injunctions in the lower Federal courts, because it is said that the city has no authority over interstate commerce.

"Mr. Bulkley: I thank the Senator. I think the bill will be of great benefit."

In short, the history and conditions of the times as shown by the Congressional hearings and debates indicate that there was a widespread belief that the impairment of state and local utility regulation by the influx of natural gas from other states at prices fixed by holding companies without any arm's length bargaining between the purchaser and seller was an evil which had to be stopped.

To remedy this evil, Congress did three things. First, the Natural Gas Act outlawed from the date of its passage every interstate gas rate that was unjust and unreasonable, and imposed upon every natural gas company the duty of charging only just and reasonable rates from that day forward. Natural Gas Act, Section 4(a); House Report 709, House of Representatives, 75th Congress, First Session, April 28, 1937, Report to Accompany H. R. 6586, discussion of Section 4(a). Second, Congress authorized the Federal Power Commission to determine that any natural gas company had violated the Natural Gas Act by charging an unlawful rate or by not charging lawful rates, and authorized its minister to make such determination upon the complaint of any state, municipality or state commission, and further authorized the Federal Power Commission to make such information available to any municipality or state commission, thereby minimizing by the method of publicity (see *Valvoline Oil Company v. United States*, 308 U. S. 141, 146 (1939). (Mr. Justice

Reed)) the effect of the unlawful element in the interstate commerce upon the economy of the state of destination. Third, Congress authorized the Federal Power Commission to fix just and reasonable rates for the future, thereby removing the unlawful element altogether from the interstate commerce. It must be implied from these express grants of power that Congress authorized the Federal Power Commission to determine lawful rates for a period subsequent to the passage of the Natural Gas Act and prior to an initial rate-fixing order, as an aid to state regulation.

The court below suggests that the Federal Power Commission's authority to fix interim rates, upheld in *Federal Power Commission v. Natural Gas Pipeline Company*, 315 U. S. 575, 583 (1942) (Mr. Chief Justice Stone), negatives any intent on the part of Congress to confer upon the Federal Power Commission authority to determine lawful rates for a period subsequent to the passage of the Natural Gas Act and prior to an initial Commission rate-fixing order. (IV R. 202.) Of course, if the complaint of the City of Cleveland was right, the ideal arrangement would be for the Federal Power Commission to reduce Hope's rate to East Ohio the moment that complaint was filed. The state commission in Ohio could then have acted promptly in reducing the rates of the affiliated East Ohio Gas Company in Cleveland. But Congress must have known, and in fact was informed through the hearings concerning the state experience in natural gas regulation, that the necessary investigation in these natural gas rate cases takes years. Over two years after Cleveland's complaint was filed in this case—and it was the first complaint filed under the Natural Gas Act—the Federal Power Commission did not have sufficient information in its opinion to make an interim rate order. (*Supra*, p. 14.) And information as to reasonable and lawful interstate gas rates is a substantive statutory right of the state and local representa-

tives of the public interest for the years thus occupied by investigations and hearings, no less than for the future. This being so, and the Federal Power Commission being the tribunal to which municipalities, states and state commissions are referred as the ultimate guardian of the public interest in this field, it is a natural incident of the jurisdiction that the Commission should be free to make findings as to lawful rates for the period between the filing of complaints and an initial rate-fixing order fixing future rates. Congress did not seek to stop the impairment of state regulation arising from the influx of natural gas into the state of ultimate consumption at unjust and unreasonable rates primarily fixed by a holding company usually owning both the purchasing and selling subsidiaries only after the utilities had had a sporting chance for delay. Congress sought to aid state regulation beginning June 21, 1938, the effective date of the Natural Gas Act.

The holding of the court below does not support the purpose and intent of Congress but actually thwarts and defeats it. Since the passage of the Natural Gas Act, the state courts in Pennsylvania and the state commission in Ohio have held that the state commissions in Ohio and Pennsylvania are deprived by passage of the Natural Gas Act of all authority to require the distributing affiliates in Ohio and Pennsylvania to prove the costs of the producing affiliate in West Virginia in justification of the reasonableness of their interstate payments for natural gas. *Peoples Natural Gas Company v. Pennsylvania Public Utility Commission*, 14 A. (2d) 133, 35 P. U. R. (N. S.) 75 (Pennsylvania Superior Court) (1940); *East Ohio Gas Company v. Cleveland*, P. U. C. O. Nos. 11,001, *et al.*, R. 2958-2959 (Public Utilities Commission of Ohio). The upshot is that unless this Court holds in this case that the Federal Power Commission may determine lawful rates between affiliates subsequent to the filing of a complaint and prior to an initial order fixing interstate rates, the decision of the lower

court will result not in complementing state regulation, but in conferring self-regulation for several years after the effective date of the Natural Gas Act not only upon the interstate natural gas company in West Virginia, but also upon the local distributing affiliates in Ohio and Pennsylvania.

It is respectfully submitted that the Court of Appeals erred in holding that the Federal Power Commission has no jurisdiction to determine the lawful rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order, for the reason that said jurisdiction is implied from expressly granted powers, and is supported by the legislative history of the statute.

## V.

**THE COURT OF APPEALS FURTHER ERRED IN HOLDING THAT THE COMMISSION'S "FINDINGS AS TO LAWFULNESS OF PAST RATES" SHOULD BE SET ASIDE EVEN IF THE COMMISSION HAS JURISDICTION TO MAKE SUCH FINDINGS, FOR THE REASON THAT SAID FINDINGS HAVE A RATIONAL BASIS AND ARE SUPPORTED BY SUBSTANTIAL EVIDENCE.**

The majority below held that "the findings as to past rates * * * should be set aside for the reasons heretofore given in discussing valuation and depreciation." (IV R. 203.)

It is submitted that the Court of Appeals thus erred in setting aside the Commission's "Findings as to Lawfulness of Past Rates" for the same reasons that it erred in setting aside the Commission's "Order Reducing Rates."

The Court of Appeals finally rested its decision upon the further ground that "the finding as to unreasonableness of these rates cannot be sustained because made on the basis of the utility's experience during the years in question, instead of upon a reasonable estimate of expense based upon experience of a prior period." (IV R. 203.)

This was the lower court's final error, because in determining lawful past rates the actual operating experience for the years in question is better than prophecy. *West Ohio Gas Company v. P. U. C.*, 294 U. S. 79, 82 (1935) (Mr. Justice Cardozo).

Dobie, Circuit Judge, dissenting below, rightly concluded (IV R. 207):

> "For the reasons stated, I think the decision and findings of the Commission should be affirmed."

## CONCLUSION.

Upon a fair consideration of the record and applicable law we submit that:

1. The Court of Appeals erred in holding that the Commission's "Order Reducing Rates" and "Findings as to Lawfulness of Past Rates" are unconstitutional, for the reason, among others, that there is no constitutional question involved in this case.

2. The Court of Appeals further erred in setting aside the Federal Power Commission's "Order Reducing Rates" for the reason that said order is authorized by the Natural Gas Act, and is based upon findings which have a rational basis and are supported by substantial evidence.

3. Even if there were a constitutional question involved, as there is not, the Court of Appeals further erred in setting aside the Federal Power Commission's "Order Reducing Rates" for the reason that in the absence of an exercise of the power of eminent domain or other direct appropriation of property for the use of the United States Government, respondent was not entitled under the Fifth Amendment to anything more than due process of law.

4. The Court of Appeals erred in holding that the Federal Power Commission has no jurisdiction to determine the lawful rates for interstate sales of natural gas at wholesale after the effective date of the Natural Gas Act of 1938 and prior to the issuance of a Commission rate-fixing order, for the reason that said jurisdiction is implied from expressly granted powers, and is supported by the legislative history of the statute.

5. The Court of Appeals further erred in holding that the Commission's "Findings as to Lawfulness of Past Rates" should be set aside, even if the Commission has jurisdiction to make such findings, for the reason that said findings have a rational basis and are supported by substantial evidence.

Therefore, it is respectfully submitted that the judgment of the United States Circuit Court of Appeals for the Fourth Circuit should be reversed, and that the Federal Power Commission's "Order Reducing Rates" and "Findings as to Lawfulness of Past Rates" should be affirmed.

Respectfully submitted,

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# In the Supreme Court of the United States

**OCTOBER TERM, 1943.**

## No. 35.

CITY OF CLEVELAND,
*Petitioner,*

v.

HOPE NATURAL GAS COMPANY,
*Respondent.*

ON WRIT OF CERTIORARI TO
THE UNITED STATES CIRCUIT COURT OF APPEALS
FOR THE FOURTH CIRCUIT.

## REPLY BRIEF OF PETITIONER.

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October 18, 1943.

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ON WRIT OF CERTIORARI TO
THE UNITED STATES CIRCUIT COURT OF APPEALS.
FOR THE FOURTH CIRCUIT.

## REPLY BRIEF OF PETITIONER.

### STATEMENT.

This brief is filed by petitioner, City of Cleveland, in reply to the brief filed herein on behalf of respondent, Hope Natural Gas Company.

The first question, says respondent, is whether the Commission's "Order Reducing Rates" is confiscatory? (Brief on Behalf of Hope Natural Gas Company, October Term 1943, Nos. 34 and 35, p. 2.) The Federal Power Commission's wartime rate order is just, reasonable and compensatory and is not repugnant to the due process clause of the Fifth Amendment. The Commission's wartime rate order permits respondent to earn in wartime the same profit and rate of profit which respondent was able to earn when it fixed its own interstate rates in the normal peacetime base period selected by respondent as fair, namely, 1937-1939, inclusive. When the great bulk of the nation's business is operating in a strictly controlled economy under a statutory renegotiation scheme which holds out to in-

dustry no promise of war profits materially greater than normal peacetime profits, in spite of vastly increased volume, it requires considerable temerity for the Standard Oil Company (New Jersey) to claim through this wholly owned subsidiary, Hope Natural Gas Company, that Hope's property is confiscated—that is, stolen—by a wartime order of the Federal Government which permits the Company to earn under wartime conditions the same profit and rate of profit after all taxes which it earned in its own selected peacetime base period when it fixed its own interstate rates free of any Government regulation. If temporary use of respondent's property had been requisitioned by the Government during this war, it does not appear that the just compensation or rental to which respondent would be entitled by statute or under the Fifth Amendment would exceed the same profit and rate of profit which respondent was able to earn when it fixed its own rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive. Respondent's gas is destined for the Cleveland-Akron-Pittsburgh triangle and the price of it enters directly or indirectly into the cost of planes, tanks, ships, and guns for which the American people as a whole must pay. Since it does not appear that respondent would have been entitled to more if the possession of its property had been requisitioned, the Commission's order deprives respondent of only the opportunity to charge more than the use of its property is reasonably worth at the expense of the public in wartime. The Federal Power Commission's wartime rate order is just, reasonable, and compensatory and is not repugnant to the due process clause of the Fifth Amendment.

The second question, says respondent, is whether the court below properly set aside the Federal Power Commission's "Findings as to Lawfulness of Past Rates" as an "order"? (Brief on Behalf of Hope Natural Gas Com-

pany, October Term 1943, Nos. 34 and 35, pp. 2, 128.) The Circuit Court of Appeals had no jurisdiction to review the Federal Power Commission's "Findings as to Lawfulness of Past Rates" and no jurisdiction to decide in this case whether the Federal Power Commission had authority to make such findings. The Federal Power Commission's "Findings as to Lawfulness of Past Rates" are not an "order." These "Findings" do not have the same effect upon Hope's affiliate in a proceeding before a State commission as a Federal Power Commission order fixing rates for the future. An order fixing rates for the future, so long as it remains in effect, is absolutely binding upon the affiliate in a proceeding before a State commission. The Federal Power Commission's "Findings as to Lawfulness of Past Rates," on the contrary, are subject to challenge by Hope's affiliate in the proceeding before the State commission upon the grounds that they are unsupported by substantial evidence, outside the jurisdiction of the Federal commission, or otherwise unlawful. And any order of the State commission adopting such findings is subject to judicial review upon all these grounds, as well as upon Constitutional grounds. The Federal Power Commission's "Findings as to Lawfulness of Past Rates" were not reviewable in the Circuit Court because they are not an "order."

## ARGUMENT.

### I.

### THE FEDERAL POWER COMMISSION'S WARTIME "ORDER REDUCING RATES" IS JUST, REASONABLE AND COMPENSATORY AND IS NOT REPUGNANT TO THE DUE PROCESS CLAUSE OF THE FIFTH AMENDMENT.

#### A. The Commission's wartime rate order permits respondent to earn in wartime the same profit and rate of profit which respondent was able to earn when it fixed its own rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive.

##### 1. The Hope company proves by its conduct, experience and claims in the 1937-1939 period of Company-fixed rates that the claimed return which the Commission allowed on the Company's claimed interstate present value rate base is not confiscatory.

The Company's claimed interstate net operating income at Company-fixed rates for the years 1937-1939, inclusive, was $1,885,000. (I R. 481.) The Company's claimed interstate rate base during the same period of Company-fixed rates was $66,360,000. (I R. 481.) The Company's claimed per cent return earned on the Company's claimed interstate rate base during the same period of Company-fixed rates averaged 2.84 per cent.

The following table shows (1) the Company's claimed interstate net operating income during the 1937-1939 period of Company-fixed rates; (2) the Company's claimed interstate present value rate base during the 1937-1939 period of Company-fixed rates; (3) the Company's claimed per cent return earned on the Company's claimed interstate present value rate base during the 1937-1939 period of Company-fixed rates (I R. 481):

| Years 1937-1939 | Company's claimed interstate net operating income during period of Company-fixed rates 1937-1939 | Company's claimed interstate present value rate base during perfod of Company-fixed rates 1937-1939 | Company's claimed per cent return earned on company's claimed interstate present value rate base during period of Company-fixed rates 1937-1939 |
|---|---|---|---|
| 1937 | $ 2,642,452 | $66,360,837 | 3.98% |
| 1938 | 785,080 | 66,360,837 | 1.18% |
| 1939 | 2,228,912 | 66,360,837 | 3.36% |
| Average | $ 1,885,481 | $66,360,837 | 2.84% |

It will be noted that in the 1937-1939 period of Company-fixed rates, the Company's claimed interstate net income falls short of the $4,313,454 which would be necessary to yield a 6½ per cent return on the Company's claimed interstate present value rate base by an average of $2,427,773 per year, and never in any one year even remotely approaches a 6½ per cent return.

Of course, the Company's claim, coupled with the fact that it was satisfied with its 1937-1939 Company-fixed interstate net earnings, as appears below, suggests the inference that either the Company's net income for these years is understated, or that its rate base is inflated, or both. *Dayton Power and Light Company v. Public Utilities Commission of Ohio*, 292 U. S. 290, 311-312 (1934) (Mr. Justice Cardozo); *Lindheimer v. Illinois Bell Telephone Company*, 292 U. S. 151, 163-164 (1934) (Mr. Chief Justice Hughes).

But laying that question to one side, and accepting the Company's claims at face value, the conclusion is inevitable that when the Company fixed its own rates in what it calls the normal period 1937-1939, inclusive (Petition for Review, IV R. 30-31), (1) either Hope was voluntarily confiscating its own property; or (2) Hope is able to live and meet its capital requirements with a 2.84 per cent return upon the claimed $66,000,000 present value of its physical property.

Hope's conduct repels any inference that it was voluntarily confiscating its own property when it fixed its own rates in what it calls the three average normal years 1937-1939, inclusive. Hope denied in the pleadings in this case that the rates to East Ohio, Peoples, Fayette County, and Manufacturers Light and Heat, which produced the aforesaid results, were unjust or unreasonable, or had been unjust or unreasonable. (II R. 3, 12, 16, 25, 27.) Prior to the passage of the Natural Gas Act, when Hope was free to fix its own interstate rates without any public regulation, it did not exercise its power to increase the rates which it claimed produced an annual return of $1,885,000 per year, or less than 2.9 per cent on the claimed present value of Hope's physical property. When the Natural Gas Act was passed, Hope voluntarily filed the rates which produced this return with the Federal Power Commission as rate schedules. Hope never sought to file higher rate schedules with the Federal Power Commission. Both before the Federal Power Commission and in its Petition for Review in the United States Circuit Court of Appeals, Hope claimed that its average operating experience for the years 1937 to 1939, inclusive, is the proper basis for testing the reasonableness of its rates. (IV R. 30-31.) Upon these undisputed facts, there is only one possible inference—that Hope was satisfied with and able to live under an annual return of less than 2.9 per cent per annum on a claimed interstate present value rate base of approximately $66,000,000.

If we accept arguendo the Company's claims that in the years when it fixed its own rates, 1937-1939, inclusive, it earned a return from its interstate business of $1,885,000 per year, that the present value of its interstate property in those years was not less than $66,000,000, and that the return earned was less than 2.9 per cent on the Company's claimed interstate present value rate base, the conclusion follows inevitably that in the absence of any substantial change in the Company's claimed $66,000,000 present value

rate base, or in the cost of money, an annual return of $1,885,000 per year is not confiscatory for this Company, whether the rate producing that return be fixed by the Company or whether it be fixed by a regulatory commission.

**2. The Commission's ordered rates, had they been in effect in the test year 1940, would have permitted Hope to earn the same annual return on Hope's claimed interstate present value rate base with which Hope was satisfied and under which Hope lived during the 1937-1939 period of Company-fixed rates.**

Had the Commission's order reducing rates been effective in the test year 1940, the Hope company would have earned the same net return on its claimed present value interstate rate base which the Company had established by experience it was able to live on.

The court below recognized that 1940 is a proper test year, and said (IV R. 197):

> "* * * The increased demand for gas resulting from war conditions, made the experience of 1940 a safer guide for the future than that of prior years. Hope makes much of the fact that the winter of that year was more than ordinarily severe and that the increased demand for gas resulted in a large percentage of sales representing gas from its own wells, which did not involve payment of the charge required by its contracts on gas purchased from others. The increased demand due to war conditions, however, must necessarily have the same effect, so far as this matter is concerned. The experience of 1940 was the only experience properly comparable. * * *"

The Company's claimed net operating income from its interstate business for the test year 1940 was $4,629,355. (I R. 481.) The Commission ordered a reduction in interstate gross revenues on the basis of 1940 experience of $3,609,857. (I R. 6.) The federal income tax saving at the 1940 tax rate, had this reduction become effective in

1940, would have been 24 per cent of the ordered reduction in revenue or $866,366. The reduction in the Company's claimed 1940 net operating income had the Commission's order been effective in 1940 would thus have been $2,743,491. ($3,609,857 minus $866,366.) Subtracting the reduction in net income due to the Commission's order from the Company's claimed net operating income for the year 1940, it is thus a simple matter of arithmetic that on the Company's own figures the Commission's ordered rate, had it been in effect in the test year 1940, would likewise have permitted the Company to earn a net return from its interstate business of $1,885,000, the identical figure which the Company claimed it earned in the 1937-1939 period of Company-fixed rates.

Expressed in tabular form, this works out as follows:

| | | |
|---|---|---|
| Company's claimed net operating income—year 1940 (I R. 481) | | $4,629,355 |
| Reduction in Revenues Ordered (I R. 6) | $3,609,857 | |
| Less Federal Income Tax Saving at 1940 tax rate—24% of Reduction in Revenue | $ 866,366 | |
| Reduction in net income due to Commission order | | $2,743,491 |
| Company's claimed net operating income adjusted to rates ordered for the future —Year 1940 | | $1,885,864 |

The Company's claimed interstate rate base for 1940 was $66,360,000, the same as for the years 1937-1939, inclusive. (I R. 481.)

There was no substantial change in the cost of money bearing on the fair rate of return between the years 1937-1939 and the year 1940, and to the extent that there was any change, the cost of money was lower in 1940 than in the period 1937-1939. (III R. 400, *et seq.*)

In short, if the Company's net operating income and rate base figures be accepted, it is manifest that the Commission's rate, had it been in effect in the test year 1940, would have yielded the Company the same 2.84 per cent

net return on the Company's claimed interstate present value rate base, after all taxes and in spite of increased war taxes, which the Company had established by its own experience and claims was nonconfiscatory and sufficient to enable the Company to live.

**3. In fixing rates for the future, the Commission actually allowed the Company the same annual return on the Company's claimed interstate present value rate base which the Company had proved by its experience, conduct, and claims to be nonconfiscatory.**

Company counsel will be obliged to concede upon the oral argument of this case that had the Commission's rates been in effect in the test year 1940, the Company would have earned at the Commission's rates the same annual return on the Company's claimed interstate present value rate base with which the Company was satisfied and under which it lived in the 1937-1939 period of Company-fixed rates. However, the Company may assert that the earnings for years after 1940 at the Commission's rate would not be as large as for 1940 and hence not equivalent to the annual net return which the Company had itself proved to be nonconfiscatory. But we can find nothing in the record which compels this conclusion for which the Company may contend.

On the contrary, the Commission found in the opinion which it incorporated in its findings (I R. 2) that "It seems certain that 1940 will be the lowest year, on an earnings basis, of the 1940-1944 period." (I R. 70.) And this finding was supported by substantial evidence. For, as the Commission further found, the first quarter of 1941 showed an increase in net operating income over the first quarter of 1940 of about 20 per cent. (I. R. 70; III R. 361-365.) Indeed, the respondent did not seek to challenge by evidence the Commission's finding that 1940 would be the lowest year on an earnings basis for the five year period 1940-1944, in-

clusive. Respondent did not seek in the lower court to adduce additional evidence showing the operating experience of the Company for the full year 1941, as it had a right to do. (Natural Gas Act, Sec. 19(b).) Nor did respondent seek to adduce additional evidence as to the actual experience in 1942, which was available to it before the lower court rendered its decision on February 16, 1943. (IV R. 207.)

In fixing rates for the future, the Commission actually allowed the Company the same annual return on the Company's claimed interstate present value rate base which the Company had proved by its experience, conduct, and claims to be nonconfiscatory.

Of course, in the legislative process of fixing rates for the future, the Commission conservatively used 1940 as a test year to forecast future revenues, although the Commission knew and found that the president of the Hope Company had admitted in July of 1941 a great increase in sales and hence in revenues for 1941 over 1940, and liberally forecast future expenses at the 1940 figure plus $421,160. (I R. 70, 504.) (I R. 62, 70, 72.) This was simply the Commission's way of saying that it was allowing the Company at least $421,000 more than a 6½% per cent return on net investment. Referring to its rate order of May 26, 1942, the Commission says in its brief that "even, under the prescribed rate reduction, Hope is earning $1,091,790 annually in excess of a 6½ per cent rate of return, if the 1942 level is taken as the criterion." (*Federal Power Commission, et al. v. Hope Natural Gas Company*, October Term, 1943, No. 34, Brief for Petitioners, p. 28.)

The Company's brief denies the assertion of the Commission's brief, but submits an alternative calculation which shows, when accepted as an admission, that had the Commission's rate been in effect in 1942, it would have produced substantially the same net profit from the Company's interstate business that it would have produced had it been

in effect in 1940, the test year. The following table compares the 1942 and 1940 net profit at the Commission's rate on the basis of the Commission's findings and the Hope brief, Appendix E:

**Comparison of 1942 and 1940 Interstate Net Profit at Commission's Rate based on Commission's Findings and Hope Brief**

| | 1940 per Commission findings (I R. 12) | 1942 per Hope Br. App. E. p. 185 |
|---|---|---|
| Net operating income at Company-fixed rates | $5,386,597 | $4,816,284 |
| Reduction in net income due to Commission order | 2,743,491[1] | 2,165,915[2] |
| Net operating income had rates ordered been in effect for full yetar | $2,643,106 | $2,640,369 |

| | |
|---|---|
| [1]Ordered reduction in gross revenues (I R. 6) | $3,609,857 |
| Less Federal Income Tax saving at 1940 corporate income tax rate—24% of ordered reduction in gross revenues | 866,366 |
| Reduction in net income | $2,743,491 |
| [2]Ordered reduction in gross revenues (I R. 6) | $3,609,857 |
| Less Federal Income Tax saving at 1942 corporate income tax rate—40% of reduction in gross revenue | 1,443,943 |
| Reduction in net income—1942 | $2,165,915 |

But the Commission's legislative method of fixing future rates must not be confused with the question whether the rate which the Commission fixed is confiscatory. As this Court has said in a case where the question of confiscation was involved; *Pacific Gas Company v. San Francisco*, 265 U. S. 403, 406 (1924) (Mr. Justice McReynolds):

> "The problem was to ascertain the probable result of the specified rate if applied under well known past conditions, not to forecast the probable outcome of a proposed rate under unknown future conditions."

And it is respectfully submitted that in this case the result of the Commission's rate if applied to the known operating experience of the test year was clearly not con-

fiscatory, even if we accept the Company's own claims as to net operating income and present value rate base.

For the future, if conditions should change, the door of the Commission is always open to the respondent.

The Company's case analyzes down to the proposition that a claimed interstate net return of $1,885,000 per year on the Company's claimed $66,000,000 interstate present value rate base is just, reasonable, and nonconfiscatory if fixed by the Hope Natural Gas Company, but becomes unjust, unreasonable and grossly confiscatory if fixed by the Federal Power Commission.

The Commission's wartime rate order permits respondent to earn in wartime the same profit and rate of profit which respondent was able to earn when it fixed its own rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive.

**B. If temporary use of respondent's property had been requisitioned by the Government, it does not appear that the just compensation to which respondent would be entitled, during this war, either by statute or under the Fifth Amendment would exceed the same profit and rate of profit which respondent was able to earn when it fixed its own rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive.**

If the President had commandeered temporary use of Hope's property for war purposes under his Constitutional war powers or under the Second War Powers Act the Government would not be required to pay Hope as compensation more than a just and fair rental for the use. 50 U. S. C. A. App. Sec. 632; Const. Amend. 5; See Note, *Executive Commandeering of Strike Bound Plants*, 51 Yale L. J. 282, 290 (1941); *Marcus, The Taking and Destruction of Property Under a Defense and War Program*, 27 Cornell L. Q. 476, 521 (1942); Cf. 50 U. S. C. A. App. Sec. 309.

The most wholesale attempt of the Federal Government to take possession of public utility property in wartime is the seizure of the railroads during World War I.

When President Wilson addressed the Congress on January 4, 1918 in explanation of his assumption of control of the railroads, he said (H. R. Document No. 764, 65th Congress, Second Session, 1918, p. 4):

> "While the present authority of the Executive suffices for all purposes of administration, and while of course all private interests must for the present give way to the public necessity, it is, I am sure you will agree with me, right and necessary that the owners and creditors of the railways, the holders of their stocks and bonds, should receive from the Government an unqualified guarantee that their properties will be maintained throughout the period of federal control in as good repair and as complete equipment as at present; and *that the several roads will receive under federal management such compensation as is equitable and just alike to their owners and to the general public. I would suggest the average net railway operating income of the three years ending June 30, 1917.* I earnestly recommend that these guarantees be given by appropriate legislation and given as promptly as circumstances permit." (Italics ours.)

In accordance with President Wilson's recommendation, Congress adopted in the Federal Control Act of March 21, 1918 as the basis of compensation for the use of the railway property thus taken over during the war the normal peacetime base period net railway operating income of the three years ending June 30, 1917, as follows (40 Stat. 451) (1918):

> "*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the President, having in time of war taken over the possession, use, control and operation (called herein Federal Control) of certain railroads and systems of transportation (called herein carriers), is hereby authorized to agree with and to

guarantee to any such carrier making operating returns to the Interstate Commerce Commission, *that during the period of such Federal Control it shall receive as just compensation an annual sum, payable from time to time in reasonable installments, for each year and pro rata for any fractional year of such Federal Control, not exceeding a sum equivalent as nearly as may be to its average annual railway operating income for the three years ended June thirtieth, nineteen hundred and seventeen.*

*"That any railway operating income accruing during the period of Federal Control in excess of such just compensation shall remain the property of the United States * * *."* (Italics ours.)

No railroad ever brought a test of the constitutionality of the Federal Control Act of March 21, 1918 to this Court. See *Hines, War History of American Railroads* (1928), pp. 94-95; *Aitchison, War Time Control of American Railways*, 26 Va. L. R. 847, 870, *et seq.* (1940); *American Economic Mobilization*, 55 Harvard L. R. 427, 533-534 (1942). But the opinion of President Wilson, the opinion of the Congress of the United States, and the conduct of hundreds of railroads affected by the legislation, constitute persuasive proof that the allowance as just compensation in time of war for even an actual taking of the use of private property of the average earnings of a normal peacetime base period satisfies the requirements of the Fifth Amendment.

The Federal Government is now the sole purchaser for the bulk of the nation's production in the controlled war economy which has replaced the normal free market. Under the Renegotiation Act, as amended, industries selling to the Government may retain after renegotiation only what a renegotiation board thinks is a fair profit. There is no formula for determining a fair profit under the Renegotiation Act. But if the contractor's operations in relation to his renegotiable business are the same or similar to those of his peacetime business, the board will look to the

contractor's base period of peacetime earnings as a measure of his allowable war profits. The renegotiation boards consider the contractor's earnings *before taxes, not after taxes. Steadman, Renegotiation of War Contracts,* 42 Mich. L. R. 1, 14, 17, 19 (August, 1943). When the great bulk of the nation's business is operating under a statutory renegotiation scheme which holds out to industry no promise of war profits materially greater than normal peacetime profits in spite of vastly increased volume, it requires considerable temerity for the Standard Oil Company (New Jersey) to claim through this wholly owned subsidiary, Hope Natural Gas Company, that Hope's property is confiscated—that is, stolen—by a wartime order of the Federal Government which permits the Company to earn under wartime conditions the same profit and rate of profit *after all taxes* which it earned in its own selected peacetime base period when it fixed its own interstate rates free of any Government regulation.

It is respectfully submitted that if the use of respondent's property had been requisitioned by the Government during the present war, the just compensation to which respondent would have been entitled under the Fifth Amendment would not exceed the same profit and rate of profit which respondent was able to earn when it fixed its own rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive.

**C. Since it does not appear that respondent would have been entitled to more if the temporary use of its property had been requisitioned, the Commission's order deprives respondent of only the opportunity to charge more than the use of its property is reasonably worth at the expense of the public in wartime.**

To find a helpful precedent it is necessary to go back to a case which arose out of the first world war.

In *Highland v. Russell Car Company*, 279 U. S. 253 (1929) (Mr. Justice Butler), this Court said at page 262:

> "* * * The principal purpose of the Lever Act was to enable the President to provide food, fuel and other things necessary to prosecute the war without exposing the government to unreasonable exactions. The authorization of the President to prescribe prices and also to requisition mines and their output made it manifest that, if adequate supplies of coal at just prices could not be obtained by negotiation and price regulation, expropriation would follow. Plaintiff was free to keep his coal, but it would have been liable to seizure by the government. The fixing of just prices was calculated to serve the convenience of producers and dealers as well as of consumers of coal needed to carry on the war. As it does not appear that plaintiff would have been entitled to more if his coal had been requisitioned, the Act and orders will be deemed to have deprived him only of the right or opportunity by negotiation to obtain more than his coal was worth. Such an exaction would have increased the cost of the snowplows and other railroad equipment being manufactured by the defendant and therefore would have been directly opposed to the interest of the government. As applied to the coal in question, the statute and executive orders were not so clearly unreasonable and arbitrary as to require them to be held repugnant to the due process clause of the Fifth Amendment."

In the case at bar, the Commission's wartime rate order permits respondent to earn in wartime the same profit and rate of profit which respondent was able to earn

when it fixed its own interstate rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive. If the use of respondent's property had been requisitioned by the Government during this war, it does not appear that the just compensation to which respondent would be entitled by statute or under the Fifth Amendment would exceed the same profit and rate of profit which respondent was able to earn when it fixed its own rates in the normal peacetime base period selected by respondent as fair, namely 1937-1939, inclusive. Respondent's gas is destined for the Cleveland-Akron-Pittsburgh triangle and the price of it enters directly or indirectly into the cost of planes, tanks, ships, and guns for which the American people as a whole must pay. Since it does not appear that respondent would have been entitled to more if the possession of its property had been requisitioned, the Commission's order deprives respondent of only the opportunity to charge more than the use of its property is reasonably worth at the expense of the public in wartime.

It is respectfully submitted that the Federal Power Commission's wartime rate order is just, reasonable, and compensatory and is not repugnant to the due process clause of the Fifth Amendment.

## II.

## THE CIRCUIT COURT OF APPEALS WAS WITHOUT JURISDICTION IN THIS CASE TO REVIEW THE FEDERAL POWER COMMISSION'S "FINDINGS AS TO LAWFULNESS OF PAST RATES" OR DECIDE THE QUESTION OF THE COMMISSION'S AUTHORITY TO MAKE SAID FINDINGS.

On May 26, 1942, the Federal Power Commission, acting upon complaint of the City of Cleveland, and after investigation and hearing, made what the Commission called "Findings as to Lawfulness of Past Rates." (I R. 8-13.)

Hope erroneously dubs the Federal Power Commission's "Findings as to Lawfulness of Past Rates" an "Or-

der" (Petition for Review, IV R. 3, 4, 10), incorrectly asserts that the Commission attempted to "fix" past rates (Petition for Review, IV R. 37, point 23); and devotes six points and five pages of its Petition for Review under the caption "Part B—As To The Commission's 'Findings as to Lawfulness of Past Rates'" to a purported appeal from these findings. (Petition for Review, IV R. 37-41, inclusive; points 22-27, inclusive.)

On September 12, 1942, the City of Cleveland filed with the Circuit Court a timely motion to dismiss Part B of the Petition for Review (IV R. 43, 53) and on September 21, 1942, the City of Akron filed a similar motion with the Circuit Court. (IV R. 155, 161.)

The Court of Appeals nevertheless held the Commission's "Findings as to Lawfulness of Past Rates" were an order, that they were reviewable, and in its judgment set these findings aside as an order. (IV R. 207.)

But the Solicitor General, representing the Federal Power Commission, has suggested in this Court that the Commission's "Findings as to Lawfulness of Past Rates" were not reviewable by the lower court and counsel for the Pennsylvania Public Utility Commission and the City of Akron have joined in raising the issue of the jurisdiction of the lower court. (*Federal Power Commission, et al. v. Hope Natural Gas Company*, October Term, 1943, No. 34, pp. 112-115.)

As a matter of fact, the issue was first raised by counsel for the Hope Natural Gas Company.

At the oral argument before the Federal Power Commission, counsel for Hope conceded that such findings as to lawfulness of past rates are nonappealable, as follows (Milde, C. C. A. 4, Typewritten Record 14,179):

> "We cannot appeal from any recital you make that the rates *were* unreasonable and unlawful in 1916 or 1928 or 1938, or any other time."

This concession was not one improvidently made in the heat of argument. Prior to the oral argument before

the Commission, counsel for Hope filed a printed memorandum with the Federal Power Commission, wherein they said ("Memorandum on Behalf of Hope Natural Gas Company as to the Commission's Jurisdiction in these Proceedings to Adjudge that the Company has in the past Violated the Natural Gas Act," p. 6n):

> "Section 19(b) of the Act does not authorize review of determinations by the Commission even as important as a determination that a company is a natural-gas company under the Act. This Commission has so argued before all courts in which this matter has come up and it has been sustained in this construction. *Canadian River Gas Co. v. Federal Power Commission,* 110 F. (2d) 350, 113 F. (2d) 1010 (C. C. A. 10th, 1940); *New York State Natural Gas Corporation v. Federal Power Commission* (C. C. A. 2d, October 26, 1939, not reported); Cf. *East Ohio Gas Company v. Federal Power Commission,* 115 F. (2d) 385 (C. C. A. 6th, 1940)."

The upshot is that all counsel in this case have at one time or another taken the position that the Circuit Court was without jurisdiction to review mere findings such as the Federal Power Commission's "Findings as to Lawfulness of Past Rates."

The only applicable statute is the Natural Gas Act, Section 19(b), which provides (52 Stat. 831; 15 U. S. C. Sec. 717r(b)):

> "(b) Any party to a proceeding under this chapter aggrieved by an *order* issued by the Commission in such proceeding may obtain a review of such *order* in the circuit court of appeals of the United States for any circuit wherein the natural-gas company to which the *order* relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the *order* of the Commission upon the application for rehearing, a written petition praying that the *order* of the Commission be modified or set aside in whole or in part.

A copy of such petition shall forthwith be served upon any member of the Commission and thereupon the Commission shall certify and file with the court a transcript of the record upon which the *order* complained of was entered. Upon the filing of such transcript such court shall have exclusive jurisdiction to affirm, modify, or set aside such *order* in whole or in part. No objection to the *order* of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to be taken before the commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original *order*. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such *order* of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 346 and 347 of Title 28, as amended." (Italics ours.)

Under the Natural Gas Act Section 19(b), the Circuit Court has jurisdiction to review only "orders" of the Federal Power Commission. It has no jurisdiction to review mere findings.

The "Findings as to Lawfulness of Past Rates" from which petitioner attempts to appeal in Part B of the Petition for Review are not an order. They are findings.

These "findings" are not the basis of the Commission's order fixing rates for the future. That order is based on other findings which are attacked in Part A of the Petition for Review. Under the Natural Gas Act, the only finding that is necessary to a rate reduction order is the finding that the existing rate "*is* unjust, unreasonable, unduly discriminatory, or preferential" or that the "existing rates * * * are not the lowest reasonable rates." (Natural Gas Act, Sec. 5(a); 15 U. S. C. A. Sec. 717d; 52 Stat. 823.) In this case, the Federal Power Commission's rate reduction order, fixing future rates, is based solely upon the findings incorporated therewith. These "Findings as to Lawfulness of Past Rates" could have been made on May 26, 1942, even if the Hope company had voluntarily reduced its interstate rates on May 25, 1942, and even if the Commission had never made an "Order Reducing Rates." The Commission expressly made these findings as an aid to state regulation and properly made them in a paper and under a caption separate and apart and different from the findings incident to the "Order Reducing Rates." (I R. 8.) The Federal Power Commission's order fixing rates for the future which is attacked in Part A of the Petition for Review is not based upon the Federal Power Commission's "Findings as to Lawfulness of Past Rates."

The Federal Power Commission's "Findings as to Lawfulness of Past Rates" neither direct nor restrain any action on the part of Hope. They neither command nor direct anything to be done. They carry no direction of obedience to any previously formulated order of the Commission. Cf. *Rochester Telephone Corporation v. United States*, 307 U. S. 125, 129 (1939) (Mr. Justice Frankfurter).

These "findings" are determinations of fact. They are not in substance an order. They are not even in form an order. They have no characteristic of an order, either affirmative or negative. They do not have the effect of an order. Cf. *Columbia Broadcasting System v. United*

*States*, 316 U. S. 407 (1942) (Mr. Chief Justice Stone). They are only a decision on a controverted matter. These findings are a report—an opinion as distinguished from a mandate.

These findings may be evidence in another proceeding of a breach of statutory duty on the part of petitioner. But the Act imposed the duty. The "findings" do not.

The mere fact that these "findings" may be used as evidence against petitioner or its affiliate in another proceeding does not make them reviewable in this one.

Assuming arguendo that they are binding in another proceeding as between parties to the case before the Commission and their privies, unless unsupported by substantial evidence, outside the jurisdiction of the Commission, or otherwise unlawful, the "findings" are subject to challenge in such other proceeding on all these grounds, and petitioner or its privies will have their day in court when and if the findings are offered in evidence against them.

In the Natural Gas Act, Congress has distinguished carefully between orders, which it makes reviewable, and mere determinations, findings, and reports, which it does not make reviewable.

In the body of the statute, for example, Congress specifically mentions "orders" fixing future rates (Natural Gas Act, Sec. 5(a)); "orders" determining accounts in which particular outlays shall be entered, charged, or credited (Natural Gas Act, Sec. 8(a)); "orders" authorizing exporting or importing natural gas to or from a foreign country (Natural Gas Act, Sec. 3); "orders" requiring refund of proposed increased rates collected under bond (Natural Gas Act, Sec. 4(e)); "orders" directing a natural gas company to extend or improve its transportation facilities (Natural Gas Act, Sec. 7(a)); "orders" directing a natural gas company to establish physical connection of its transportation facilities with the facilities of, and to sell natural gas to, any person or municipality engaged or legally authorized to engage in the local distri-

bution of natural gas or artificial gas to the public. (Natural Gas Act, Sec. 7(a)) Congress has authorized the Court of Appeals to review such orders. (Natural Gas Act, Sec. 19(b).)

On the other hand, in the body of the Natural Gas Act, Congress has referred to many determinations, reports, and findings, which it purposefully does not call "orders." For example, there is the determination of cost of production or transportation of natural gas by a natural gas company in cases where the Federal Power Commission has no authority to establish a rate governing the transportation or sale of such natural gas. (Natural Gas Act, Sec. 5(b).) There are reports to Congress on information assembled relative to proposed interstate compacts dealing with the conservation, production, transportation, or distribution of natural gas. (Natural Gas Act, Sec. 11(a)) and reports to Congress relative to operation of a compact between two or more states approved by Congress. (Natural Gas Act, Sec. 11(b).) And there is the determination whether any person has violated or is about to violate any provision of the Act or any rule, regulation or order thereunder. (Natural Gas Act, Sec. 14(a).) These findings, determinations, and reports Congress did not authorize the Circuit Court of Appeals to review. (Natural Gas Act, Sec. 19(b).)

The Petition for Review filed by Hope in the Circuit Court of Appeals set forth two separate and distinct causes of action, one arising under a law of the United States, and the other not arising under a law of the United States. For reasons that have already been made manifest, the latter is entirely outside the federal jurisdiction and subject to dismissal at any stage of the case. It is hardly necessary to say that a federal court is without the jurisdictional power to entertain a cause of action not within its jurisdiction, merely because that cause of action has mistakenly been joined in the complaint with another which

is within its jurisdiction. *Hurn v. Oursler,* 289 U. S. 238, 245-246 (1933) (Mr. Justice Sutherland).

Part B of the Petition for Review should be dismissed because it seeks review of mere "findings." Under Section 19(b) of the Natural Gas Act, it is only an order of the Federal Power Commission and not a finding that the Circuit Court is authorized to review.

The Circuit Court of Appeals was without jurisdiction in this case to review the Federal Power Commission's "Findings as to Lawfulness of Past Rates" or decide the question of the Commission's authority to make said findings. *Shannahan v. United States,* 303 U. S. 596, 599, 601 (1938) (Mr. Justice Brandeis); *Shields v. Utah Idaho Central Railroad,* 305 U. S. 177, 179, 182-183 (1938) (Mr. Chief Justice Hughes); *Federal Power Commission v. Metropolitan Edison Company,* 304 U. S. 375, 385 (1938) (Mr. Chief Justice Hughes); *United States v. Los Angeles and Salt Lake Railroad,* 273 U. S. 299, 309-312 (1927) (Mr. Justice Brandeis); *American Federation of Labor v. National Labor Relations Board,* 308 U. S. 401, 408-412 (1940) (Mr. Chief Justice Stone); *United States v. Atlanta, Birmingham and Coast Railroad Company,* 282 U. S. 522, 527-528 (1931) (Mr. Justice Brandeis).

## SUMMARY OF ARGUMENT.

1. The Federal Power Commission's wartime rate order is just, reasonable and compensatory and is not repugnant to the due process clause of the Fifth Amendment.

The Commission's wartime rate order permits Hope to earn in wartime the same profit and rate of profit which Hope was able to earn when it fixed its own rates in the normal peacetime base period selected by Hope as fair, namely 1937-1939, inclusive.

When the great bulk of the nation's business is operating in a strictly controlled economy under a statutory renegotiation scheme which holds out to industry no promise of war profits materially greater than normal peacetime

profits, in spite of vastly increased volume, it requires considerable temerity for the Standard Oil Company (New Jersey) to claim through this wholly owned subsidiary, Hope Natural Gas Company, that Hope's property is confiscated—that is, stolen—by a wartime order of the Federal Government which permits the Company to earn under wartime conditions the same profit and rate of profit *after all taxes* which it earned in its own selected peacetime base period when it fixed its own interstate rates free of any Government regulation.

If temporary use of Hope's property had been requisitioned by the Government, it does not appear that the just compensation or rental to which Hope would be entitled during this war either by statute or under the Fifth Amendment would exceed the same profit and rate of profit which Hope was able to earn when it fixed its own rates in the normal peacetime base period selected by Hope as fair, namely 1937-1939, inclusive.

Hope's gas is destined for the Cleveland-Akron-Pittsburgh triangle and the price of it enters directly or indirectly into the cost of planes, tanks, ships, and guns for which the American people as a whole must pay.

Since it does not appear that Hope would have been entitled to more if the temporary use of its property had been requisitioned, the Commission's order deprives Hope of only the opportunity to charge more than the use of its property is reasonably worth at the expense of the public in wartime.

It is respectfully submitted that the Federal Power Commission's wartime rate order is just, reasonable and compensatory and is not repugnant to the due process clause of the Fifth Amendment.

2. The Circuit Court of Appeals was without jurisdiction in this case to review the Federal Power Commission's "Findings as to Lawfulness of Past Rates" or decide the question of the Commission's authority to make said findings.

These findings are not an order.

These "Findings" do not have the same effect upon Hope's affiliate in a proceeding before a State commission as a Federal Power Commission order fixing rates for the future. An order fixing rates for the future as long as it remains in effect is absolutely binding upon the affiliate in a proceeding before a State commission. The Federal Power Commission's "Findings as to Lawfulness of Past Rates" are subject to challenge by Hope's affiliate in the proceeding before the State commission upon the grounds that they are unsupported by substantial evidence, outside the jurisdiction of the Federal Commission, or otherwise unlawful, and any order of the State commission adopting such findings is subject to judicial review upon all these grounds as well as upon Constitutional grounds.

It is respectfully submitted that the Federal Power Commission's "Findings as to Lawfulness of Past Rates" were not reviewable in the Circuit Court because they are not an "order."

## CONCLUSION.

Therefore, it is respectfully submitted that the judgment of the United States Circuit Court of Appeals for the Fourth Circuit should be reversed, and that the Federal Power Commission's wartime rate order herein should be affirmed.

Respectfully submitted,

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IN THE

# Supreme Court of the United States

**October Term, 1943.**

**No. 34.**

FEDERAL POWER COMMISSION, CITY OF AKRON and PENNSYLVANIA PUBLIC UTILITY COMMISSION,

v.

HOPE NATURAL GAS COMPANY.

Writ of Certiorari to Review a Judgment of the United States Circuit Court of Appeals for the Fourth Circuit.

## BRIEF FOR THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK AMICUS CURIAE.

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IN THE

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FEDERAL POWER COMMISSION, CITY OF AKRON and PENNSYLVANIA PUBLIC UTILITY COMMISSION,

v.

HOPE NATURAL GAS COMPANY.

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Writ of Certiorari to Review a Judgment of the United States Circuit Court of Appeals for the Fourth Circuit.

---

## BRIEF FOR THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK AMICUS CURIAE.

The Public Service Commission of the State of New York having an interest in this litigation, adverse to Hope Natural Gas Company, presents the following brief as *amicus curiae*.

This brief will be confined to the single question as to whether the labor and equipment cost of Hope Natural Gas Company, incurred prior to 1923 in drilling wells, and charged during those years to operating expenses, should

now be added to the capital account in determining the original cost of the property of that company devoted to the public service.

## Statement of Facts.

This is a writ of certiorari granted by this Court on May 17, 1943, to review the judgment of the United States Circuit Court of Appeals for the Fourth Circuit, entered on February 16, 1943, which set aside an order of the Federal Power Commission reducing the rates of Hope Natural Gas Company, and which set aside the Federal Power Commission's "Findings as to Lawfulness of Past Rates."

## Interest of the Public Service Commission of the State of New York.

The Public Service Commission of the State of New York is a state regulatory commission and is charged with the duty of regulating the rates and charges of natural gas companies distributing gas within the State of New York (§72 P. S. L.). In addition, it is empowered to require natural gas companies to keep continuing property records showing the original cost of their property used in the public service.

Section 114 of the Public Service Law of the State of New York in part provides:

> "Temporary rates.—To facilitate prompt action by the commission in proceedings involving the reasonableness of the rates of any public utility and to avoid delay in any such rate proceeding, the commission is hereby authorized to require any public utility company to establish, provide and maintain continuing property records, including a list or inventory of all of the physical property actually used in the public service, and to require any public utility company to keep its books, accounts and records in such manner

as to show currently the original cost of said physical property and the reserves accumulated to provide for the retirement or replacement of said physical property."

The holding of the United States Circuit Court of Appeals for the Fourth Circuit in this proceeding that there should be included in the original cost of the property of the Hope Company amounts expended for labor and equipment in drilling gas wells where it appeared that such amounts had been charged by the company to operating expenses, will directly affect the New York State Public Service Commission in proceedings involving the proper rates and charges of natural gas companies, and in proceedings involving the establishment of continuing property records by such companies.

It has appeared in numerous prior proceedings, and in certain proceedings now pending, conducted by the New York State Public Service Commission, that natural gas companies under its jurisdiction, have charged to operating expenses large sums representing labor cost in drilling gas wells. The establishment of a legal rule that these amounts must be included in the original cost of the property of these companies would directly affect this Commission in the exercise of its statutory duties.

## ARGUMENT.

**The labor and equipment cost of Hope Natural Gas Company incurred prior to 1923 in drilling wells and charged during those years to operating expenses should not now be added to the company's capital account in determining the original cost of the property of that company used in the public service.**

It is the position of the New York State Public Service Commission that the Federal Power Commission in its

opinion of May 26, 1942, properly determined this matter and that the Circuit Court of Appeals in setting aside the order of the Federal Power Commission, and in holding that these expenses must be considered in determining the original cost of the company's property, committed error. It is our position that the Court failed to distinguish between amounts that are properly included in fixing the original cost of the company's property and amounts that would be included in an estimate of what it would cost to reproduce such property under the present prices and under the presently prescribed accounting procedure. In this connection the Court said: "And, even if the prudent investment theory be adopted for determining the rate base, we see no valid reason for excluding these items from the investment." (P. 300).

We further urge that the Court failed to appreciate that the accounting practices under which the cost of drilling wells was charged to operating expenses were, at the time when the expenditures were made, entirely proper and in accordance with the then established accounting procedure. As to this the Court said: "There is little excuse for not considering as capital investment items *erroneously charged to expense.*" (P. 303) (Italics ours.)

**Error in Determining "Original Cost"**

In determining what was the "original cost" of a utility's property there can be no dispute as to whether the majority of expenditures are properly chargeable to operations or to capital. There are, however, certain expenditures that lie on the border line, and under different systems of accounts or under different accounting procedures might properly be included as either an operating expenses or a capital

charge. As to these border line items the books and records of the company are important, for if a particular expenditure was at the time it was incurred properly charged as an operating expense and was so paid and so entered upon the utility's books, it must remain, even though under present practices it would be entered as a capital charge. Such an item cannot be an operating expense when paid and a capital charge for the purpose of a rate proceeding. This is one distinction between a determination of original cost and a determination of the cost of reproducing utility property.

**Error in the holding that these Expenditures were "Erroneously Charged to Expense"**

It is unnecessary to here argue the fairness or propriety of allowing a company that has in past years inflated its operating expenses by including therein amounts that *should concededly* have been charged to capital to include these amounts in the company's rate base. No such situation is presented. It is our understanding that the opinion of the Federal Power Commission, involved in this cause, in no way finds or requires that any conceded capital expenditure should be excluded in fixing rates, even though such an expenditure had been charged to operations.

The disputed items excluded by the Commission and included by the Court were only those that the Commission found had been properly charged to operating expenses under the accounting procedure in force at the time such costs were incurred. It, therefore, appears that the discussion contained in the opinion of the Court that "Consumers pay for service not for the property

used to render it." and that "the revenue paid by the customer for service belongs to the company" and other similar statements have no relevancy. Such discussion would only be material if the Power Commission had based its findings on the theory that proper capital charges must be disregarded in fixing rates if they had originally been charged against operations and therefore paid by the company's customers. It is our position that the proper rule is that if at the time it was incurred a particular expenditure could, under accounting practices then in effect, be considered an operating expense, and if it was so paid and so recorded it must remain on the books of the company as an operating expense and cannot for the purpose of a rate proceeding be considered a capital charge.

If we are correct, and we believe we are, in this argument, the question before this Court narrows to a determination of whether the action of Hope Natural Gas Company in paying as an operating expense the labor and equipment cost of drilling wells was authorized under the practice of natural gas company in effect at the time.

We will restate our position:

**The Labor and Equipment Cost of Drilling Wells by a Natural Gas Company can Properly be Considered an Operating Expense**

In considering the accounting practices of natural gas companies, their specialized operating method must always be kept in mind, and the practices of other types of utilities have little if any application. New gas wells must continually be drilled, not to enlarge or extend the company's operations but simply to maintain its operations and to

enable it to continue to supply gas to its customers. If no new wells were drilled the company's available supply of gas would rapidly decrease and its investment in transmission and distribution mains would be reduced to their scrap value. The drilling of new wells is therefore required if the utility's investment is to kept intact. The labor cost of such well drilling in no way corresponds to expenditures made by an electric, manufactured gas or water company in extending its system to secure additional consumers or to make available increased production. The labor cost incidental to the placing in operation of new wells is in a very true sense an operating expense of a natural gas company. It corresponds to the labor cost required to operate the generating plant of an electric company and so provided the product that the utility is selling or the labor cost required to produce gas at a gas plant of a manufacturing gas company. In the natural gas business the operating company must meet the payroll of men employed in securing a continuing supply of gas to be distributed to the utility's customers. In a manufacturing gas plant the company must similarly meet the payroll of men employed in operating its gas manufacturing plant and so securing a continuing supply of manufactured gas to be distributed to its customers. Can it be said that such labor cost of a manufacturing company is not an operating expense?

That these labor costs can properly be considered as operating expenses is not a novel theory advanced for the first time by the Federal Power Commission. It was the practice of the Hope Company for many years, and it had been the almost universal practice of the natural gas industry. This was pointed out by the Commission when it stated: "It was the consistent practice of the Hope Company up to 1923 to charge the cost of drilling wells to

operating expense. This likewise was the general practice of the new gas industry."

In this connection it appears that the Circuit Court misconstrued the West Virginia law requiring that these types of expenditures be charged directly to capital. Such a requirement does not mean that the accounting practice that had been so uniformly followed was improper. It simply amounted to a determination that the new accounting practice was more desirable. This is understandable. In a regulated utility wide fluctuations in operating expenses should, if possible, be avoided, and since new wells must be drilled, if the continued flow of gas is to be maintained, the utility may during short periods engage in extensive drilling, and if such new wells are productive, may for other short periods temporarily curtail expenses. Operating expenses would increase and decrease, depending on whether or not wells were required.

In view of the peculiar business of natural gas companies, and in view of the almost uniform practice of the industry, we urge that this Court should not hold that the payment by Hope Natural Gas Company through operating expenses of the cost of well drilling was improper at the time these expenditures were incurred, or that the Federal Power Commission improperly excluded such expenditures in its determination of the original cost of the company's property.

**Decisions of State Courts and Regulatory Commissions**

The question of whether any expenditure charged by a utility to operating expenses should be included in the rate base has been considered in numerous proceedings by

state courts and regulatory commissions. Reference to these decisions is included to demonstrate that the accounting practice followed by Hope Natural Gas Company prior to 1923 has received the approval of these state bodies.

*District of Columbia.*

In *Re Potomac Electric Power Co.*, P. U. R. 1917D, 563, 607, the Commission pointed out:

> "Without deciding as to the accuracy of the proposed percentage basis, it appears to this Commission to be contrary to the best interests of all concerned to permit the company thus to revise its operating expenses. Much confusion must inevitably result from such a modification of what has heretofore been understood as 'operating expenses' in the sense in which the term has been used by the company. Owing to the peculiar position occupied by statements of operating expenses in published reports, it is the opinion of this Commission that it is subversive to the intent and purpose of effective regulation to acquiesce in any policy which would deprive such statements of their *bona fide* character, whether in the past or in the future."

*Idaho*

In *Re Kootenai Power Company*, P. U. R. 1924E, 831, 833, the Commission said:

> "When funds are paid out as operating expenses and deducted from gross earnings in determining the net earnings of the company, such expenses should not later be segregated and capitalized against future generations. If this were to be done, such expenses had as well be charged to the capital account in the first place. If these are operating expenses, and are paid as such, that is what they are. They are not operating charges when paid, and capital charges for the purpose of capitalization at a later date by this Commission."

*Illinois*

In *Illinois Commerce Commission v. Commonwealth Edison*, 15 P. U. R. (NS) 404, 405-406, the Illinois Commission said:

> "The company contended that the cost of its physical property as shown by the books did not report the true or actual cost of the company for such property, inasmuch as many items of cost had not been charged to the property account * * *
>
> "* * * These expenditures represent largely items which the company paid during these years for general administrative and supervisory services. It is evident that the company considered these expenditures as a part of its daily operating expenses because it so charged them upon its books and so reported them in its reports to the Commission. It would be improper to allow the company to capitalize on its books now any items (apart, of course, from mere accounting errors) which were charged to operating expenses and so reported in reports to the Commission for the period from July 1, 1913, to the present."

In *Illinois Commerce Commission v. Public Service Commission*, 4 P. U. R. (NS) 1, the Commission pointed out:

> "* * * Neither as a matter of equity or law is it proper for the Commission to permit the inclusion in a rate base of charges already paid for by customers. For the Commission now to sanction this policy would be to result in placing a premium upon charging to operating expenses charges properly belonging to fixed capital accounts, and destroying the purpose and functions of the uniform classification of accounts."

In *People Gas Light & Coke Co.*, 19 P. U. R. (NS) 177, 196, the Illinois Commission said:

> "* * * The practice of the Company in charging administrative, legal, engineering, * * * expenses to operating expenses rather than to fixed capital, did not arise from a mere incidental error upon the part of the company, but seems, rather, to have represented a fixed policy on the part of the management.
>
> "The original cost of the property for rate making purposes may not be increased because of a change in

> the company's policy with respect to the charging of overhead items as between operation and cost of the property * * *."

*Maine*

In *Re Augusta Water District*, P. U. R. 1917B, 653, 656, it appeared that the Commission was fixing the cost of an extension upon which consumers were required to guarantee a certain return. The Commission excluded, among other charges made, salaries paid for superintendence which had been charged to operating expenses, saying:

> "It can make no difference that some of these charges might, under some conditions, go into plant account. They do not do so under the practice pursued by this utility, and cannot be allowed in this case."

Numerous other decisions could be cited but we believe the quoted cases are representative of the attitude of the state courts and regulatory commissions.

## CONCLUSION.

**From the foregoing arguments we believe it has been shown that the labor and equipment cost of Hope Natural Gas Company incurred prior to 1923 in drilling wells should not now be added to the company's capital account in determining the original cost of property of that company used in the public service.**

Respectfully submitted.

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September, 1943.

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IN THE

# Supreme Court of the United States

OCTOBER TERM, 1943.

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FEDERAL POWER COMMISSION, CITY OF AKRON, AND PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioners*,

v.

HOPE NATURAL GAS COMPANY.

---

## BRIEF ON BEHALF OF THE NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS, AMICUS CURIAE.

---

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HOPE NATURAL GAS COMPANY.

---

## BRIEF ON BEHALF OF THE NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS, AMICUS CURIAE.

---

### OPINIONS BELOW.

The opinion of the Circuit Court of Appeals is reported in 134 Fed. (2nd) 287, and will be found in the record herein in Vol. IV, page 169. The opinion of the Federal Power Commission has not been officially reported, but can be found in 44 P. U. R. (NS) 1, and will be found in the record herein in Vol. I, page 14.

## PRELIMINARY STATEMENT.

The National Association of Railroad and Utilities Commissioners, hereinafter called the Association, is a voluntary association, embracing within its membership the membership the members of the regulatory commissions and boards of the several states of the United States except two, one of which has no state regulatory commission.

By the constitution of the Association, the Executive Committee of the Association may direct the General Solicitor to appear on behalf of the Association (as distinguished from a particular commission represented in it's membership) in any proceeding pending before any court or commission in which, in the judgment of said Executive Committee, appearance on behalf of the Association should be made.

This brief is offered for filing on behalf of said Association, in the general public interest, by direction of the Executive Committee of said Association given in a resolution, adopted by said Committee, reading as follows:

> "Resolved, that the legal representatives of this Association be directed to file an *amicus curiae* brief on behalf of the Association in the *Hope Natural Gas Company* case now pending in the United States Supreme Court, reaffirming the position heretofore taken with respect to valuation for rate purposes in the *Natural Gas Pipeline Company* case."

## STATEMENT OF THE CASE.

A full statement of the case, to which we refer, is contained in the brief of the Petitioners herein, beginning at page 4 of that brief. As a basis for the argument contained in this brief, the following summary statement is made.

The Hope Natural Gas Company, hereinafter called Hope, is a natural gas company which produces natural gas in West Virginia. It sells a part of the gas so produced in that State, and sells the remainder in interstate

commerce to other companies, which make resale thereof to the public in the States of Ohio and Pennsylvania.

On October 14, 1938, upon consideration of complaints before it, the Federal Power Commission entered upon an investigation of Hope's rates and charges, with the purpose of fixing such rates and charges, subject to its jurisdiction, if found to be unjust, unreasonable or discriminatory, upon a just, reasonable and non-discriminatory basis (R. Vol. I, p. 28). With that purpose it held a hearing, and made a valuation of Hope's properties. At such hearing Hope was afforded full opportunity for the introduction of evidence, and for the cross examination of witnesses produced by other parties to the proceeding, and was heard in oral argument.

At the hearing Hope presented evidence as to the original cost of its properties, claiming such cost to be $69,735,637. It likewise produced evidence as to what it termed the "original cost trended to 1938 prices," which was claimed to amount to $105,101,912 (R. Vol. I, p. 193). Hope also introduced evidence of a claimed reproduction cost new of its properties amounting to $97,340,000 (R. Vol. I, p. 163 and R. Vol. IV, p. 171).

In an opinion rendered on May 26, 1942, concerning Hope's evidence of reproduction cost and of trended original cost, the Commission said in part:

> "After full consideration of the estimate of reproduction cost new presented by the Company, we find that it is not predicated upon facts and that it is too conjectural and illusory to be given any weight in these proceedings. * * *
>
> "The Company also presented a trended 'original cost' estimate which exceeded $105,000,000. * * * The evidence discloses fundamental errors in the trending process used. * * *
>
> "In the light of the evidence the conclusion is inescapable that the Company's trended 'original cost' estimate is not founded in fact, but it is basically erroneous and produces irrational results.
>
> "The reproduction cost studies and the so-called trended 'original cost' studies were the typical, hypo-

thetical conjectures which have plagued rate regulation for more than forty years. The actual development and experience of the Hope Company were ignored. In addition, assumption upon assumption as to material and labor costs, and magnified imagination as to overheads were indulged in lavishly. The results have no probative value and accordingly must be condemned." (R. Vol. I, pp. 21-23)

Concerning Hope's claimed original cost, the Commission, in its opinion, said in part:

"The first step in the Company's determination was the taking of an inventory. The inventory units were then priced at estimated cost, including arbitrary overheads. The amounts shown as plant costs by the books were ignored, except for the purpose of aiding in estimating unit costs. As is shown by Table A, the Company's method resulted in a claimed net increase of $17,004,972 over the amount recorded as investment in the interstate properties on its books of account. The Company claims, in other words, that its books fail to show the true cost of such properties in that amount. The items of that amount which are identifiable represent expenditures previously charged to expense accounts. Some of the alleged expenditures were not incurred at all." (R. Vol. I, p. 24)

The Commission, in its opinion, found that the recorded book cost of Hope's properties was $52,730,666, but that certain charges were erroneous, and that certain items had been omitted. Correcting these errors, the Commission found the actual legitimate cost, or gross plant investment to be $51,207,621. (R. Vol. I, p. 36)

Hope claimed that items of expense for well drilling, and other purposes (not appearing on its books as part of its recorded investment), which, under the Commission's present system of accounts, may be charged to capital investment, should now be included in the Commission's finding of original cost. The Commission rejected that contention, for reasons stated at length in its opinion. (R. Vol. I, p. 31) At the same time the Commission did include in its original cost finding items aggregating $1,295,953 representing plant

costs which were originally capitalized and later charged off to operating expenses. (R. Vol. I, p. 35)

The Commission also included, in its rate base finding hereinafter stated, $1,392,021 for the estimated cost of net capital additions up to the end of 1943, also $566,105 for unoperated acreage adjudged useful and $2,125,000 for working capital, including materials and supplies. (R. Vol. I, p. 50)

The Commission found the accrued depreciation of Hope's properties to be $22,328,016. In making this finding the Commission used the so-called straight line depreciation method, to determine the annual depreciation for each year, it applied depreciation rates based upon the estimated service life of property, to the original cost of that property, with proper allowance for salvage value. The service lives, upon which the depreciation rates used were based were determined upon the evidence of a qualified engineer, upon the staff of the Commission, who testified as follows:

> "During the course of the determination of the average service lives of this property, numerous and detailed inspections were made of all classes of property in the system. This includes an inspection of all visible property subject to examination such as structures and compressing station equipment and sample inspections at many points of the underground pipe and buried property comprising the pipeline system. I also made analyses to determine the property retirement experience of the company covering property whose service life had been terminated and the depreciation realized and a review of the maintenance policy and operating practices over the forty-year history of the company. In addition, a study was made of the service age of the principal identifiable units of the company's property. (Service age is the period of time between the date when property is first placed in service and the date of the investigation.) Careful consideration and effect was also given to all of the relevant facts determinable concerning the probable future life expectancy of the principal physical units of property. In addition to the extensive inspection and study of the company's property, there was available during the process

of determining the average service lives for all classes of this property, considerable relevant data from the following sources: (enumerated)" (R. Vol. III, p. 158)

The Commission in its opinion indicated its reasons for attributing no weight to Hope's evidence in support of its claims of original cost, trended cost, and cost of reproduction new. Also, referring to its own finding of original cost, the Commission said:

> "This actual legitimate cost is predicated upon facts and it is the best evidence in these proceedings, so we will employ it for determining the proper and allowable rate base." (R. Vol. I, p. 36)

After indicating the reason for deducting accrued depreciation and for consideration of the other items added to the original cost, as found by it, the Commission said:

> "The Commission, therefore, adopts the foregoing amounts as the interstate rate base for the dates indicated, for the Company's property assembled as a whole and doing business as part of an integrated system. The Commission finds * * * that the rate base for fixing future rates is $33,712,526." (R. Vol. I, p. 50)

The Commission found 6½ per cent to be a fair rate of return for Hope. (R. Vol. I, p. 67) The Commission further found that Hope's earnings under existing rates produced net operating revenues in excess of 6½ per cent upon the rate base found by the Commission in the amount of $3,609,857, and that such existing rates were to that extent unreasonable. It accordingly, by order, prescribed rate reductions designed to reduce Hope's net operating revenues to approximately 6½ per cent upon the rate base found. (R. Vol. I, pp. 1, 70 and 72)

Hope by petition sought a review of the Commission's order in the United States Circuit Court of Appeals for the Fourth Circuit, alleging confiscation of its property (R. Vol. IV, pp. 1 and 19) That court, with one judge dis-

senting, set aside the Commission's order upon grounds which are fully stated in its opinion (R. Vol. IV, p. 169) from which the following excerpts are quoted:

"The vital questions in the case relate to the determination of the rate base; and, in view of the low rate of return allowed and the consequent lack of margin to take care of error in the base, the rates allowed must be condemned as unreasonable and confiscatory because of the following errors with respect to the valuation of the property constituting the base; (1) the Commission did not find the present fair value of the property and took no account of the change of price levels in determining the rate base; (2) the Commission ignored items of well drilling costs and overhead, aggregating in excess of $17,000,000, which entered into the original cost of the property, basing this action on the fact that, under the system of accounting that prevailed at the time, these items had been charged on the company's books to expense; and (3) the Commission ignored evidence as to the present condition of the property and computed accrued depreciation theoretically on the straight-line service-life method." * * * (R. Vol. IV, p. 172)

"The report of the Commission shows, not only that it gave no consideration to rise in price levels in determining the amount of the rate base, but also that it made no attempt to ascertain the present fair value of the property involved. It adopted as the rate base the original cost of the property as shown by the company's books, adjusted to correct bookkeeping errors and depreciated as above indicated." * * * (R. Vol. IV, p. 172)

"Not to be confiscatory, rates must allow a fair return upon the present fair value of the property. To determine this fair return upon present fair value, the Commission must find what the present fair value of the property is." * * * (R. Vol. IV, p. 184)

"In the pending case, original investment cost cannot be taken alone as a measure of the present fair value of the property because of the great changes in the prices of labor and materials which have occurred over the more than forty years during which the investments in the property have been made. These

changes are matters of general and common knowledge and are shown by many publications, statistical reports and other documents readily available. That such changes have occurred is shown also by the evidence offered before the Commission. It is true that the statements of reproduction cost and trended original cost fail to allow for the increased productivity of labor and fail to take account of other pertinent factors; and the Commission, we think, was justified in refusing to accept the conclusions therein contained. But this does not mean that the Commission could ignore the change in price levels which was clearly established and was matter of general and common knowledge otherwise. The Commission's staff prepared statements showing that the conclusions of Hope's reproduction cost and trended cost statements should not be accepted. They could doubtless have furnished estimates as to the proper effect to be accorded price trends in the correct valuation of the property. At all events, the Commission should have given consideration to the matter; and, if of opinion that investment cost was a true measure of the present value of the property notwithstanding increase in prices, it should have found this as a fact. It could not absolutely ignore the fact of increased price levels in determination of present fair value." * * * (R. Vol. IV, pp. 180-181)

"The Commission computed accrued depreciation by applying the straight-line service-life method to its properties, i. e. by finding a rate of depreciation based on the average service life of property, multiplying this by the years the property had been in use, and applying this percentage to the book cost of the property." * * * (R. Vol. IV, p. 189)

"Many of the consequences complained of will be eliminated when the present value of the property is considered in the light of changed price levels and the depreciation percentage is applied to the higher valuations resulting. We think, however, that the Commission may not close its eyes to the actual present condition of the property in determining present value and compute depreciation on the basis of mere formulas, as it has done in this case." * * * (R. Vol. IV, p. 190).

"It is clear, we think, that annual depreciation must be computed on the basis of the present fair value of the property." * * * (R. Vol. IV, p. 194)

## QUESTIONS TO BE ARGUED HEREIN.

This brief is filed in support of the following propositions:

1. The court below erred in holding that the Federal Power Commission did not find the present fair value of the properties of Hope, in the sense that "fair value" is required to be found by the decisions of this court.

2. The court below erred in holding that the Commission gave no consideration to relevant matters of common knowledge nor to the evidence as to changes in price levels which had occurred since Hope started operation.

3. The court below erred in holding that the Commission was required, as a part of the rate-making process, to determine price trends during the history of the property valued and the effect thereof upon the reproduction cost of such property, and to give effect thereto in fixing the rate-making value of such property.

4. The court below erred in holding that the Commission should have included in its finding of original cost the items of expense for well drilling and other purposes which were charged to operating expenses by Hope, when the same were incurred, and hence were not included as capital cost items by the Commission.

5. The court below erred in holding that the Commission determined the accrued depreciation of Hope's property with eyes closed as to the actual present condition of the property and without consideration of such actual condition.

6. The court below erred in holding "that annual depreciation must be computed on the basis of present fair value of the property."

7. The court below erred in holding the rates prescribed by the Commission to be unreasonable and confiscatory.

## SUMMARY OF ARGUMENT.

1. The Commission found the "fair value" of Hope's property in the sense that "fair value" is required to be found under the decisions of this Court. The decision below to the contrary is based upon a misconstruction of what the Commission did. The two sentences in the Commission's opinion, upon which the Court below seized, to support its misconstruction, do not have the meaning attributed to them below, when read with their context, and in the light of the entire opinion.

The Commission recognized its duty to find a rate base, it discussed Hope's evidence, and stated its reasons for not giving weight to the same, and also its reasons for considering its own original cost finding "the best evidence"; and it announced its purpose to employ its own finding "for determining the *proper* and *allowable* rate base." The Commission likewise discussed its reasons for deductions from and additions to original cost, as found by it, and announced the rate base adopted "for the company's property assembled as a whole and doing business as part of an integrated system."

In *California Railroad Commission* v. *Pacific Gas and Electric Co.*, 302 U. S. 388, an almost precisely similar case, the Commission did not denominate its rate base finding as "value" or "fair value" but the court sustained the rate order based thereon.

2. The Commission was not required to make a reproduction cost finding, by the use of price trends, or by any other method. In effect, the court below ruled that it is an indispensable part of the rate-making process for the Commission to make a reproduction cost estimate by some method.

To obligate the Commission to use price trends is the equivalent of prescribing a formula for finding rate value, which, in applicable decisions, this Court has held the Constitution does not contemplate.

3. The decision below, that the rate-making method followed by the Commission in this case was unconstitutional, invites an amplification of the pronouncement made by this Court in *Federal Power Commission* v. *Natural Gas Pipeline Co. case*, 315 U. S. 575. In the Association's brief in that case argument was made at some length, here repeated, that the *Smyth* v. *Ames* rule, properly understood and applied, leaves freedom to rate-making agencies to value property for rate-making purposes according to its own independent judgment, and that, under applicable decisions, rate-making value may be based upon original cost evidence.

In the *Natural Gas Pipeline Company case*, this court made a pronouncement which is believed intended to affirm such a construction of such applicable decisions. It is suggested that it is desirable that the Court in this case make clear that such pronouncement was so intended.

4. The Commission properly used the straight-line method in determining the extent of accrued depreciation, and computed such depreciation upon the original cost of the property depreciated. The opinion in *United R. & E.* v. *West*, 280 U. S. 234, requiring depreciation to be based on the present "fair value" of the property, is unsound, and should be over-ruled. It is unsound because it lays down a rule impossible of application.

In determining depreciation in this case, the Commission did not proceed with its eyes closed, nor without considering the actual condition of the property. The rates of depreciation used were estimated by a competent engineer, who carefully inspected the property to be valued, and estimated depreciation lives upon consideration of the age and condition of such property.

5. The Commission properly refused to include in the original cost found well drilling costs and overheads connected therewith which were charged to operating expenses when incurred, in accordance with an established policy of the company.

6. The pronouncement of the court in the *Natural Gas Pipeline Co. case* is construed to mean that a regulatory commission may determine its own formula for finding value. The decision below evidences that the pronouncement is not so understood by some Judges of eminence. An amplification of the pronouncement would accordingly aid regulatory commissions and federal and state courts.

The pronouncement in the *Natural Gas Pipeline Co. case*, as construed in this brief, appears to leave the law exactly as it should be. No single formula for finding rate base value should be prescribed, but rate regulatory commissions should be free to determine rate-making formulas.

7. The Commission's order, viewed in its entirety, produces no arbitrary result.

## ARGUMENT.

### The Commission Found the Fair Value of Hope's Property, in the Sense That "Fair Value" is Required to be Found Under the Decisions of This Court.

The decision of the court below is based upon a misconstruction of the Commission's decision, which the court places upon that decision by reason of certain language in the Commission's opinion. In this respect the case is identical with *California Railroad Commission* v. *Pacific Gas and Electric Company*, 302 U. S. 388, as will be later pointed out herein.

In its opinion in the case now before this court, the Commission at one point said:

> "With the decline in favor of the doctrine of 'fair value' as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates." (R. Vol. I, p. 32)

The court below, in its opinion, seized upon these sentences in the Commission's opinion, and treated them as

the equivalent of a ruling by the Commission that bona fide investment constitutes the rate base, and that other evidence was to be ignored.

The Commission did in fact base its finding of a rate base upon original cost, to which, in making its finding, it simply added other items of expense by Hope, which the Commission found justly ought to be taken into consideration. Because the Commission chose to adopt that formula in making its finding, the Court of Appeals ignored the fact that the Commission made a finding. Pointing to the language of the Commission quoted above (R. Vol. IV, p. 172), the court treated the Commission's action and opinion as establishing that (1) "the Commission did not find the present fair value of the property and * * *, (2) * * * ignored items of well drilling cost and overhead * * *, and (3) * * * ignored evidence as to the present condition of the property and computed the accrued depreciation theoretically * * *."

The court thus attributed to the above quoted declaration by the Commission, respecting the decline in favor of the doctrine of "fair value" and respecting the "all important" character of bona fide investment, a significance which plainly is not tenable, when that declaration is read with its context, and in the light of the entire opinion of the Commission.

The declaration is found in the Commission's discussion of Hope's claim, made for the inclusion in original cost, and for reflection in the rate base found, of various items of expense which Hope claimed were incurred in the acquisition of property. Hope had included these items in its claimed original cost, and, in its claimed cost of reproduction new, had likewise included the estimated cost of reproduction new of the property alleged to have been acquired by said claimed expenditures.

The items in question were not found recorded in the investment accounts, but were alleged to have been charged to expense. The Commission refused to recognize the inclusion of such items as capital, saying that the attempt

thus to recast books of account, upon the basis of an inventory, with items of property priced at "estimated 'actual cost'" is the equivalent of estimating reproduction cost, which has fallen into disfavor; and that such an "estimated 'original cost'" represents an attempt to tamper with bona fide investment figures, which have now become "all important", by applying to the determination of actual cost "the reproduction cost *process* * * * permeated with conjectural estimates." That the declaration had no broader application is plain, when it is read in its context, which we here quote as follows:

> "The past determinations of the items constituting plant investment were deliberate, conscious acts on the part of management at the time of the transactions. A decision obviously must be made when an expenditure occurs as to whether it represents an investment in plant or an expense. There must also be some finality to these decisions. If they are treated as expenses at one time and as plant investment subsequently, chaos in rate-making and in corporate finance will prevail. * * * The Company kept plant and expense accounts throughout its history and conformed to the general business practices of the industry and like business institutions. It was evidently thoroughly convinced as to the propriety of its decisions, as witness its claim before the West Virginia Commission in 1921, that the very expenditures in question were operating expenses. The Company is now estopped from re-accounting for those expenditures.
>
> "With the decline in favor of the doctrine of 'fair value' as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates. Immediately, however, we find an effort to tamper with these. There is in progress an attempt to make the reproduction cost *process* survive in the determination of actual cost of or investment in plant. Thus, in this case an inventory was taken and then units were priced at the estimated 'actual cost.' The method should be condemned at the threshold. For in addition to being permeated with conjectural esti-

> mates, it gives no heed to the realities of past events. Consistent treatment of expenses and plant investment costs is indispensable to the successful operation of the regulatory system." (R. Vol. I, p. 32)

The Commission unquestionably made no finding of the true cost of reproduction; and its reference to the decline in favor of the "fair value" doctrine "as the only mode of utility rate regulation," plainly had reference to a method of determining a rate base in which a reproduction cost determination was considered as an indispensable element for consideration.

The Commission recognized its duty to find a rate base. In making such finding it considered the estimates which Hope had introduced and indicated its reasons for not giving weight either to the original cost claimed or to the claimed "trended original cost or to the claimed reproduction cost new." Thereupon, referring to its own finding, the Commission said:

> "This actual legitimate cost is * * * *the best evidence* in these proceedings, so we will employ it *for determining* the *proper* and allowable rate base." (R. Vol. I, p. 36)

Having stated its reason for considering its original cost finding as the best evidence upon which to rest a rate base finding, the Commission stated its reasons for deducting its estimate of accrued depreciation, and its reasons for certain additions, saying: "The Commission, therefore, adopts the foregoing amounts as the interstate rate base for the company's property assembled as a whole and doing business as part of an integrated system. The Commission *finds* * * * that the rate base for fixing future rates is $33,712,526." (R. Vol. I, pp. 36 and 50)

In the face of the language of the Commission's opinion, to which we have above adverted, it appears plain that the court below erred in saying that the court "ignored" the evidence offered by Hope, or that it did not find the present

fair value of the property involved, unless (1) the constitution requires that such finding be based upon reproduction cost or (2) the constitution requires that such a finding must expressly denominate the rate base finding a finding of fair value. The constitution requires neither, as this court has expressly held in recent decisions.

In *California Railroad Commission* v. *Pacific Gas and Electric Company*, 302 U. S. 388, the California Railroad Commission had received evidence presented by the utility as to the reproduction cost of its property, but had refused to make use of the same in determining the rate base, stating in its report, that it found the same unsatisfactory. In its report the Commission said:

> "During its entire history in establishing reasonable rates for utilities similar to this company, to determine a proper rate base this Commission has used the actual or estimated historical costs of the properties undepreciated, with land at the present market value. * * * This historical method has dominated the Commission's findings for several principal reasons." (302 U. S. 394)

The United States District Court enjoined the enforcement of the Commission's rate reduction order upon the ground that the Commission had failed to find the fair value of the property in accordance with the requirement of decisions of this court. The District Court pointed to the above quoted language in the Commission's report and said:

> "An examination of the opinion and order of the Railroad Commission shows that they did not undertake to ascertain the fair value of the property nor a fair return upon that value. They did fix the rate base at approximately the historic cost and estimated the fair return on that base as $7,000,000. * * *
>
> "In view of the rejection by the Commission of all evidence concerning the cost to reproduce the property, and in the absence of a specific finding as to the fair value of the property, the question is whether the de-

cision of the Commission can stand as against a charge that the plaintiff had been denied due process of law. * * *

"It is clear from the decision of the Supreme Court in West v. C. & P. Tel. Co., supra, that it is a denial of due process for the state regulatory body to refuse to consider proper evidence of the cost of reproduction and that rates fixed in that manner are illegal and void. A fortiori, it is a denial of due process to refuse to consider any evidence of the cost of reproduction." * * * (13 Fed. Supp. 935-936)

It would seem that the cited case and the case now before this court were as precisely similar as it would be possible for two cases to be. When the *Pacific Gas and Electric case* was decided here, this court brushed aside the misconstruction which the District Court had placed upon the Commission's decision. Recognizing the right of the Commission to reject evidence considered by it, if found not entitled to weight, the court said:

"'The Commission was entitled to weigh the evidence introduced, whether relating to reproduction cost or to other matters. The Commission was entitled to determine the probative force of respondent's estimates. That the Commission did so is apparent from both its statement to that effect and the reasons it gives for considering these estimates to be without positive value. * * * Nor did the ruling with respect to the weight of evidence as to reproduction cost leave the Commission without evidence of the value of respondent's property. We have frequently held that historical cost is admissible evidence of value. * * * In the instant case we cannot say that the Commission in taking historical cost as the rate base was making a finding without evidence and therefore arbitrary. * * * The Commission specifically found what it considered to be the rate base. 39 Cal. R. C. supra, p. 76. The Commission found that rate base to be reasonable. Id. p. 77, note. The import of its opinion is that the rate base represented the Commission's conclusion as to the value which should be placed upon respondent's property for the purpose of fixing rates.' (302 U. S. 388, 397, 398, 399, 400)."

In this case, now before the court, the Commission's opinion, read as a whole, demonstrates that the Commission gave much consideration to the evidence offered by Hope, and refused to give weight to the same for reasons which were persuasive to it; and that it treated original cost, as determined by the Commission, and other items of expenditure which it held entitled to consideration, as "evidence" for determining a "*proper* and *allowable* rate base." The entire opinion evidences an intent to deal fairly with the utility, and various important questions which might have been determined adversely to the utility were decided in its favor.

It is plain, upon a reading of the entire opinion, that the Commission understood its duty to find a fair rate base, and that it made such finding upon a proper consideration of all the evidence before it.

**The Commission Was Not Required to Make a Reproduction Cost Finding by the Use of Price Trends or by Any Other Method, Nor to Denominate Its Rate Base Finding as a Finding of "Value".**

The ruling in the court below is the equivalent of a holding that it was the Commission's duty, as a part of the rate-making process, to make an estimate of the present reproduction cost of Hope's properties. The court below concurred with the Commission, as to the untrustworthy character of Hope's evidence, both as to reproduction cost and as to trended original cost, saying:

> "It is true that the statements of reproduction cost and trended original cost fail to allow for the increased productivity of labor and fail to take account of other pertinent factors; and the Commission, we think, was justified in refusing to accept the conclusions therein contained. But this does not mean that the Commission could ignore the change in price levels which was clearly established and was matter of general and common knowledge otherwise. The Commission's staff

prepared statements showing that the conclusions of Hope's reproduction cost and trended cost statements should not be accepted. They could doubtless have furnished estimates as to the proper effect to be accorded price trends in the correct valuation of the property. At all events, the Commission should have given consideration to the matter; and, if of opinion that investment cost was a true measure of the present value of the property notwithstanding increase in prices, it should have found this as a fact." (R. Vol. IV, p. 180)

The court below thus, in effect, ruled that it is an indispensable part of the rate-making process, when substantial changes in price levels have occurred during the history of the property involved, for the Commission to make an estimate of reproduction cost by some method. Price trend evidence unrelated to the property to be valued would be of no significance. There must be an inventory of the property, to which the evidence may be applied. The price and the date of acquisition of each piece of property must be known. The original cost price can then, by application of the price trend from the time of purchase of such property until the date of valuation, be translated into the "trended original cost price," as of the date of valuation, and an aggregate trended original cost price can thereby be obtained.

It is obvious that this is nothing more nor less than a reproduction cost estimate made by a new method, no less hypothetical than the old estimated reconstruction method.

To hold that the Commission was obligated to determine price trends, and to make use of them in determining the rate base, is the equivalent of prescribing a formula for finding rate value, which this court has repeatedly decided the constitution does not impose. *Minnesota Rate Cases*, 230 U. S. 352, 434; *Los Angeles Gas and Electric Corp.* v. *Railroad Commission*, 289 U. S. 287, 306; *Federal Power Commission* v. *Natural Gas Pipeline Company*, 315 U. S. 575, 586.

In the *National Gas Pipeline Company case* just cited, the utility offered evidence of reproduction cost value, without inclusion therein of any amount to cover the going concern element. For the going concern element it made a claim of $8,500,000, and offered much evidence in support thereof.

The Commission disallowed the $8,500,000 claim, saying:

> "The companies' claim of $8,500,000 for going concern value must be disallowed. The amount obviously is an arbitrary claim, not supported by substantial evidence warranting its allowance. Its allowance would mean the acceptance of a deceptive fiction, resulting in an unfair imposition upon consumers. We are convinced that we are allowing in our rate base more than an adequate amount to cover all elements of value.
>
> "In disposing of the motion for interim order, we are accepting at this time the companies' estimates of

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|---|---|
| Reproduction Cost New of Physical Properties (exclusive of Gas Reserves) .... | $56,302,250 |
| Value of Gas Reserves ..... | 13,334,775 |
| Capital additions for the period June 1, 1939 to December 31, 1942 ..... | 3,808,399 |
| Working capital ..... | 975,000 |
| Total Rate Base ..... | $74,420,424 |

> "The foregoing amount allowed as a rate base may be compared with book cost of properties, plus working capital of $975,000, as of December 31, 1939, totaling $60,952,279, and therefrom it is clearly disclosed that the rate base presently allowed herein is liberal."

Upon the rate base so found the Commission, in an interim order, ordered a reduction of rates. This order was set aside by the Court of Appeals upon the ground that the Commission had failed to make any allowance for the going concern element. In reaching this conclusion, the Court of Appeals followed the same line of reasoning as has been followed by the Court of Appeals in this case, pointing out that the rate based used was identical with the reproduction cost claimed by the utility. In this connection also the court said:

"Moreover, in its opinion, the Commission said, 'The companies' claim of $8,500,000 for going concern value must be disallowed. The amount obviously is an arbitrary claim, not supported by substantial evidence warranting its allowance.'" (Natural Gas Pipeline Company, et al v. Federal Power Commission, 134 Fed. (2d) 287)

That decision of the Court of Appeals, in the *Natural Gas Pipeline Company case*, this court over-ruled, pointing out that, while no item for going concern value was separately stated in the Commission's opinion, the Commission spoke of the rate base arrived at as "liberal" and as a "generous allowance." The court thus treated the finding of the Commission, which was not denominated a finding of value, as a finding which met the requirements of the constitution, as construed by this court. Thus again, as in the *Pacific Gas and Electric case*, above cited, the court refused to isolate a fragment of a Commission opinion, or report, and to allow the language of such isolated fragment to support a ruling that the Commission had failed to do what a reading of the entire opinion or report, fairly indicates, that the Commission in fact did.

The decision in the *Natural Gas Pipeline Company case*, accordingly established the rule to be that a regulatory commission is not required by the constitution to make a reproduction cost finding, or expressly to denominate its rate base as a finding of "value" as a part of the rate-making process.

The attack which is made in this case upon the Commission's rate order, based upon the claim that the method which it followed in reaching a rate base was unconstitutional, because such rate base was rested, in substantial part, upon evidence of original cost, invites an amplification of the pronouncements heretofore made by this court touching that subject. In the *Natural Gas Pipeline Company case* the Association, in an *amicus curiae* brief, asked for a clear pronouncement covering the subject.

The paragraphs following, under the caption "Paragraphs from the Association's Brief in the Natural Gas Pipeline Company Case", are deemed as applicable to this case as they were in the *Natural Gas Pipeline Company case.*

**Paragraphs from the Association's Brief in the Natural Gas Pipeline Company Case.**

Under the decisions of this Court, the test as to the constitutional validity of rates, fixed by legislative authority, has been the sufficiency of such rates to yield a fair return on a rate base, which the Commission has denominated "fair value."

The fair value tests was first announced in *Smyth* v. *Ames*, 169 U. S. 466. The language of that case is often referred to as the *Smyth* v. *Ames* rule. It is obvious, however, that it is no rule at all, beyond its requirement that "fair value" be found, and used as a basis for determining rates which the owner of the property involved must be permitted to earn to avoid confiscation.

The use of reproduction cost estimates became common, and was treated as proper by this court. *Denver* v. *Denver Union Water Co.*, 246 U. S. 178, 191. In *Southwestern Bell Tel. Co.* v. *Public Service Commission*, 262 U. S. 276, the court went so far as to set aside the Commission rate order involved in that case, because it appeared from the Commission's report that it had not based its findings of fair value upon reproduction cost prices as of the date of the valuation. See also *McCardle* v. *Indianapolis Water Co.*, 272 U. S. 400, 410.

The cost and delays incident to recurring reproduction cost estimates were so great that attempts were made to obviate the necessity for them by the development of cost indices showing the trend of reproduction cost prices, which could be used to indicate the change in the reproduction cost of property from one date to another. The difficulties

inherent in the attempts, or in the manner in which they were used, led to the rejection of their results in court. *West* v. *Tel. Co.*, 295 U. S. 662, 667. *Ohio Bell Tel. Co.* v. *Public Utilities Commission*, 301 U. S. 292, 296

The results of attempting to follow this *Smyth* v. *Ames* rule, as it had been thus developed are well known. They were commented upon in the dissenting opinions of Mr. Justice Brandeis in *St. Joseph Stockyards Co.* v. *United States*, 298 U. S. 73, 84, and, of Mr. Justice Black in *McCart* v. *Indianapolis Water Co.*, 302 U. S. 419, 435.

Some Commissions refused to undertake to make physical valuations under the *Smyth* v. *Ames* rule, and frankly followed the practice of treating the investments of companies as a sufficient basis for determination of their rate bases. Notable among these was the Railroad Commission of California.

This practice of the California Commission came squarely before this court in *Railroad Commission* v. *Pacific Gas and Electric Co.*, 302 U. S. 388, above cited.

As originally expressed, the so-called *Smyth* v. *Ames* rule had not exalted reproduction cost evidence above every other class of evidence mentioned, nor held that reproduction cost represented minimum fair value, to which additions must be made for other elements of value, if existing. Care had been taken by the Court in *Smyth* v. *Ames* to make it clear that the enumeration of elements to be considered was not designed to be exclusive, and that the weight to be attributed to each class should be what the valuing tribunal deemed "just and right in each case." The Court was not laying down a rule to deprive legislators and legislative rate making-agencies of the exercise of their judgment. *Minnesota Rate Cases*, 230 U. S. 352, 434.

When Mr. Justice Hughes had become the Chief Justice, and came to write the opinion in the *Pacific Gas and Electric Company* case, from which we have quoted, he but expressed again what he had said more than twenty years

before. The opinion in the *Pacific Gas and Electric Company case* simply cleared away excrescencies from the rule as originally expressed by Mr. Justice Harlan.

Under the law, as recognized and emphasized in the later opinion, a rate-making agency may weigh the relevant evidence before it, and, attributing to each piece of evidence the weight it considers just, may determine the amount upon which the owner of the property regulated should be permitted to earn a return; and within the limits of the constitutional rule, which forbids confiscation, its decision is final.

There is no requirement in the constitution, nor in the decisions of this court, which compels a regulatory agency to attempt to segregate the intangible elements of a utility's property, such as its established business, from its tangible physical properties, and to determine and state a value for such intangible elements.

We join with counsel for the gas companies in considering that clarification of the situation is necessary, and join them in asking for it. Our view is that a clarification is necessary for the purpose of enabling such commissions, with confidence, to apply the rule announced in *Smyth* v. *Ames*, according to its original intent, as reestablished by the opinion in the *Pacific Gas and Electric Co. case*.

We ask the Court to make it clear that a rate regulatory commission may make its determination of the rate base without any attempt to determine the reproduction cost of properties, unless the evidence before the commission is such as to show that justice requires such cost to be estimated and considered in fixing the rate base.

It ought not to lie within the power of a utility to compel a regulatory commission to choose between expending large sums of public money to make reproduction cost estimates (which the commission knows to be not necessary for a just appraisal), or to allow a one-sided record to be made by the utility, at the expense of the rate payers, in which professional, so-called experts will present evidence of val-

uations which will consume months of time in the presentation, but will, when presented, be of no aid to the commission in reaching its determination.

If it is the judgment of the commission that estimates of reproduction cost will, in fact, be less dependable than original cost, as an aid in the determination of a proper rate base, why should the commission be compelled to consume months or years in either making or receiving such estimates? If, after the record is made, the commission may exercise its judgment to attribute controlling weight to original cost, and to disregard reproduction cost estimates, —as it may under the Pacific Gas and Electric Co. opinion, —may it not use its judgment, before the estimates are made, and rule that it will exclude such evidence.

If the Court will make such a pronouncement, it will protect the rights of all parties. It will save vast amounts of money now being wasted in the preparation and presentation of such estimates, and it will enable the regulatory commissions of the country to perform their rate making function more effectively, because they will be enabled to avoid the expense and the interminable delays which are inevitable, when utilities may demand the right to make and present reproduction cost appraisals.

The right of utilities to judicial protection against confiscation would not be jeopardized by such a pronouncement, since a utility always could come into court upon a claim of confiscation. When the facts are such as to make necessary a determination of the reproduction cost to avoid confiscation, the Court can act, if such determination is denied by the regulatory commission. For example, if we should come into a period of extreme inflation, when a rate base equal in dollars only to the original cost incurred prior to the period of inflation would be manifestly unjust, the commission would adopt means to make the rate base reflect the decreased value of the dollar, or it would permit reproduction cost estimates to be shown. If it failed to do this, the Court, upon review could grant relief.

Such a pronouncement as we are suggesting would restore to the commission the right to exercise judgment, which the court intended to preserve under its opinion in the *Smyth* v. *Ames* case.

In the *Pacific Gas and Electric Co. case* this Court restored the rule. What is now needed is a declaration which shall make clear the full import of that decision, so that a commission may exercise its judgment as to whether the rate base ought justly to be determined upon consideration solely of original cost evidence, or of reproduction cost evidence, or of both; and so that, when it has determined that either class of evidence will not be helpful, it may refuse to receive the same.

## The Pronouncement of the Court in the Natural Gas Pipeline Company Case.

In the *Natural Gas Pipeline Company case* the Court made a pronouncement, which, as we construe that opinion, fully covers this case, and establishes the right of a rate regulatory commission to exercise its judgment as to the method whereby it will find the rate base, provided only that the demands of due process are duly met. In its opinion the Court said:

> "By long standing usage in the field of rate regulation the 'lowest reasonable rate' is one which is not confiscatory in the constitutional sense. * * *
>
> "The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances. Once a fair hearing has been given, proper findings made and other statutory requirements satisfied, the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. If the Commission's order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end." (315 U. S. 575, 586)

As we understand that pronouncement, every rate regulatory commission is free to adopt such valuation methods as in its judgment will enable it to determine rates which are "not confiscatory in the constitutional sense," provided that it acts after a fair hearing, makes findings which meet the requirements of the constitutional rule, as declared by this Court, and provided that it satisfies the requirements of the statute under which it acts.

If an order so made is complained of, the Court is not concerned with the formula which the commission has followed in finding the rate base, but only in determining whether the order "viewed in its entirety" produces a result which impresses the judicial sense as arbitrary and beyond the bounds of reason.

**The Occasion for an Amplication of the Pronouncment of the Court in the Natural Gas Pipeline Company Case.**

If our construction of the pronouncement of the Court in the *Natural Gas Pipeline Company case* is correct, we believe that it leaves the law in exactly the form in which it should be. We urge that the Court should not prescribe any formula for the finding of the rate base, but should leave legislative rate-making agencies free to exercise discretion and judgment, subject only to the power of the Court to relieve from a rate order manifestly arbitrary, because not made upon a due process of law hearing, or not supported by substantial evidence.

Under the pronouncement, as we construe the same, a regulatory commission which determines that a fair rate base may be found by using the original cost method, followed by the commission in this case, may not only permit such evidence to outweigh reproduction cost evidence which may have been offered and received, but it may refuse to admit such reproduction cost evidence, for the reason that the same will not be usable under the formula adopted by the commission.

Contentions made in this case, and the opinion of the court below, make it clear that the pronouncement in the *Natural Gas Pipeline Company case* is not given the construction which we have attributed to it by some able utility counsel and by some judges of eminence. It is, accordingly, suggested that it will aid regulatory commissions, federal and state, in the performance of their respective duties, in the regulation of rates or in the review of rate regulatory orders, if the Court will so amplify the pronouncement as to make its meaning clear beyond misconception.

In this connection, it is suggested that, as a result of the long continuance of the so-called fair value rule, establishing rights under the federal constitution, it has come about that the laws of the states generally, under the specific provisions of state constitutions or statutes, or under decisions of the state courts expounding such constitutions or statutes, require that rates prescribed by state regulatory agencies must afford a fair return upon "Value." A pronouncement, accordingly, declaring that, under the Natural Gas Act, the Federal Power Commission should base rates upon net investment would not relieve state regulatory agencies from the duty to conform their acts to the requirements of applicable laws, whereas a pronouncement making it plain that value, in the sense that such term is used in the decisions of this Court, dealing with the constitutional rights of carriers and public utilities, may be found by a regulatory commission by any formula which is consistent with the requirements of due process, will undoubtedly be accepted as guiding by the state courts, in cases involving application of the laws of their respective states.

## The Commission Did Not Err in Its Determination of Accrued Depreciation.

The Commission used the straight-line method in determining the amount of accrued depreciation, and computed such depreciation upon the original cost of the property

depreciated. Use of the straight-line method was approved by this Court in the *Natural Gas Pipeline Company case* 315 U. S. 575.

In applying the straight-line method, the Commission properly computed the depreciation upon the basis of the original cost of the property involved. This point was discussed in the brief filed by the Association in the *Natural Gas Pipeline Company case*. The paragraphs appearing below, under the caption "Paragraphs from the Association's Brief in the Natural Gas Pipeline Company Case Discussing the Determination of Depreciation" are deemed applicable in this case.

**Paragraphs from the Association's Brief in the Natural Gas Pipeline Company Case Discussing the Determination of Depreciation.**

The gas companies contend that the amount to be amortized is the present fair value of their property. They rely upon the opinion of this court in *United R. & E. v. West*, 280 U. S. 234, 253. That opinion unquestionably supports their claim. We submit that the opinion is unsound and should be overruled.

The opinion is unsound because it lays down a rule which it is impossible for regulatory commissions to adopt and follow.

Such commissions have been given authority to issue orders, and to require annual or periodic reports, so that the true financial results of the operations of regulated properties may be readily known to the commissions. Orders prescribing charges which may be made to operating expenses for depreciation must be, accordingly, orders which the regulated companies may understand and comply with, and they must be orders failure to comply with which may be readily observed and proved, so that the commissions can enforce the same.

It is not possible to frame an accounting order, to provide for the charging to operating expenses of depreciation of the various classes of utility property to be determined upon the basis of the fluctuating cost of reproducing such property, which will enable the regulated companies to know the amounts which they are required to charge, or which can, as a practical matter, be enforced by the commission making the order.

For this reason, we believe it to be true that not a single regulatory commission, federal or state, has undertaken to conform its order respecting depreciation accounting to the rule laid down in *United R. & E. Co.* v. *West*.

The infirmities of that rule were pointed out in the dissenting opinion of Mr. Justice Brandeis. The almost universal practice in the business world, as pointed out in that opinion, is to base depreciation charges in accounting upon cost.

In determining the allowance to be made to operating expense in rate cases, it should be kept in mind that the rate proceeding is in no proper sense a determination of an amount to be paid to the owners for the taking of title to their property. It is, in fact, merely a determination, by public authority, of the amount which ought properly to be paid by the public for the services rendered by the enterprise, and covered by the rates to be fixed.

In determining that compensation, workable methods ought to be adopted which reasonably protect the owner and the public. If the practice is followed of charging the cost of property to operating expense in proportion to its consumption, year by year, in conformity with established business usage, the rights of both the public and the owner will be protected.

Under the *Smyth* v. *Ames* opinion (169 U. S. 466), among the matters to be considered and attributed proper weight by a regulatory agency is "the sum required to meet operating expenses." To enable such expenses to be estimated for consideration, it must be open to the rate-making agencies to compute the same upon some rational and practi-

cable basis. We maintain that if the rate-making agency, in the exercise of its judgment, adopts a method for determining the expense of annual depreciation which accords with the common practice of the business world, it is within the *Smyth* v. *Ames* rule, and that its determination can not properly be held arbitrary or otherwise unconstitutional by any reviewing Court.

**The Commission Properly Excluded Well Drilling Costs and Overhead Costs Connected Therewith Which When Paid Were Charged to Operating Exenses.**

The Commission properly excluded well drilling costs and overhead costs connected therewith which the company had charged to operating expenses when such costs were incurred. These costs were for well drilling operations in the early history of the company, prior to 1923. They aggregated approximately $17,000,000, when incurred. If included, and subjected to depreciation, they would now amount to around $4,000,000 (AR. Vol. IV, p. 184).

Under Accounting regulations now in effect, costs of this character are required to be charged to capital, but at the time these costs were incurred there was no such regulation. Hope then elected to charge them to operating expenses. They were so charged; and Hope was fully reimbursed by revenues received from rates. Such revenues were adequate to pay all operating expenses and a handsome return upon capital, as well. During the 25 years in which Hope followed the practice of charging such costs to operating expenses, it earned an average return, above operating costs, of approximately 15 per cent upon its outstanding stock and accumulated surplus. (R. Vol. I, p. 34; R. Vol. III, pp. 13-14.)

These cost items were charged by Hope to operating expenses in accordance with a determined policy, long continued. By following that policy Hope, a public utility, made its operating expenses appear larger, by the amount

of the items so charged, than they would have been had such items been charged to capital. The commission in its opinion properly said:

> "There must also be some finality to these decisions. If they are treated as expenses at one time and as plant investment subsequently, chaos in rate-making and in corporate finance will prevail."

To permit a public utility to swell its apparent operating cost by charging capital items to operating expenses, which it thereafter withdraws and adds to capital, operates as a fraud upon the public. It makes no difference whether the public utility is, at the time of following such practice, subjected to regulation or not. The public is entitled to a fair statement in the accounts of the utility, and in its financial reports, as to its operating costs.

This is true because, whether regulated by a rate-making agency or operating without such regulation, the right of the public utility to compensation for the services which it renders is limited to rates which are reasonable; and the level of reasonableness is determined upon consideration of operating expenses, among other factors. This is true whether the rate payer may appeal for protection against exorbitant charges to a regulatory commission, or must assert his rights in the courts.

Furthermore, the public, in determining whether to create a commission for the regulation of a public utility industry, may be governed by the extent of the profits above expenses which utilities in that industry are exacting from the public. Public policy accordingly requires that honesty and consistency shall be observed in public utility accounting.

Whatever may have been its purpose, Hope has exercised the freedom which has been allowed it, with respect to its manner of keeping its accounts, by charging to operating expenses not only these items which it now claims ought to have been charged to capital cost, aggregating $17,

000,000, but also by charging to operating expenses, as for depreciation, amounts aggregating more than $16,000,000 beyond the actual accrued depreciation, as found by the Commission. (R. Vol. I, p. 81). By these practices, the operating profits of Hope were made to appear $33,000,000 less than they would have appeared had the charges not been made to operating expenses.

Furthermore, Hope was not only a public utility, subject to public regulation whenever public regulation should be imposed by appropriate authority, but it was in fact subjected to public regulation in West Virginia, with respect to its sales within that State, under Chapter 9, West Va. Laws of 1913. Before the Public Service Commission of that State Hope actually used its operating expenses, including the costs for well drilling and accompanying overheads, which are the subject of this discussion, to support an application for increased rates. (Re *Hope Natural Gas Co.*, P. U. R. 121, E. 418, 440)

In other later proceedings, involving another company, claim was made before the West Virginia Commission, that similar costs, which had been similarly charged to operating expenses, should be included in the rate base. The Commission refused such inclusion, and was sustained by the Supreme Court of Appeals of the State, in *Natural Gas Co. v. Public Service Commission*, 95 W. Va. 557. At a yet later time, the same Natural Gas Company, in another rate proceeding, in which it was resisting a petition for a rate reduction, repeated its claim. In that case the Commission denied the reduction, upon consideration of a valuation made by it, which appears to have taken into account these items of claimed capital cost, which had been charged to operating expenses. Upon an appeal, the Supreme Court of Appeals of the State set the Commission's decision aside, upon that and other grounds, in an opinion in which it said:

> "In the instant case, as already indicated, the overheads and the items of physical property now sought to

be capitalized were charged to operating expenses, and the rates apparently fixed on that basis. For the company now, by virtue of a change in accounting, to attempt to capitalize such items, is certainly not just or proper, under our decisions." (*City of Wheeling* v. *Natural Gas Company*, 115 W. Va. 149)

**The Commission's Order, Viewed in Its Entirety, Produces No Arbitrary Result.**

No complaint is made that Hope was not afforded a fair hearing. The rate base finding, as we have shown, conforms to the requirements of decisions of this Court. The Commission proceeded in conformity with the statute under which it acted. Finally, the order, viewed in its entirety, produces no arbitrary result.

The rate base used exceeds the original cost less depreciation. The cost of unoperated gas acreage was reflected in the rate base. More than $16,000,000 which Hope had charged to operating expenses, was restored to capital, and included in the rate base. And upon that rate base the Commission allowed rates to yield the generous return of 6½ percent. (That this return was adjudged "low" by the Court of Appeals may perhaps indicate an unconscious disposition on the part of the court to view critically the Commission's order, rather than a disposition to approach consideration of it in the spirit which would seem to be dictated by the rule which we are now invoking.)

This return of 6½ percent may be contrasted with barely more than 5 percent, allowed to a utility by the Illinois Commission, in a rate order, which finally came before this Court. The order was sustained by the Illinois Supreme Court, and an appeal from the judgment of that court to this Court was held to present no substantial federal question. *Peoples Gas Light and Coke Co.* v. *Hart*, et al, 367 Ill. 435, 287 Ill. App. 377, 373 Ill. 31, 309 U. S. 634.

If the rate of return used in this case had been 5 percent, as in the *Peoples Gas Light and Coke Co. case*, instead of 6½ percent, that would have operated to decrease the fair

return allowed by $505,687.89. On the other hand, if $17,000,000 for well drilling and related costs, which Hope claims should have been included, had been included, and subjected to appropriate reduction for depreciation, the rate base would have been increased by approximately $4,000,000, as has been before shown. Upon that increase 5 percent would have yielded $200,000, or less than one-half of the amount by which the 6½ percent has increased Hope's earnings above that which it would have received under the return found adequate by the Court to meet constitutional requirements in the *Peoples Gas Light and Coke Company case*, just cited. Also if these items for well drilling and related costs had been included, and the full amount which Hope has charged to operating expenses, as depreciation, had been deducted, the rate base would have been $12,000,000 less than the rate base which the Commission found and used.

There are no costs incident to establishing Hope's business which have not already been recouped, through returns received in the past. Indeed, over its entire history, up to 1940, Hope's stock, issued for cash or other assets, has earned an average yield of 20.4 percent per annum (R. Vol. III, p. 15).

Of its entire issue of $35,000,000, all common stock, $15,969,300 was issued for cash or other assets. Up to January 1, 1941 it had paid out dividends in cash amounting to $97,273,640 (R. Vol. III, p. 15) and had accumulated a cash surplus as of that date, amounting to more than $8,000,000 (R. Vol. III, p. 17, Schedule 4).

Upon all of its stock outstanding in the past, including that issued in stock dividends, Hope has paid an average of 14 percent on common stock. The Commission's rate order was designed to produce a fair return of $2,191,314. This is 5 percent upon upwards of $43,800,000. It will enable payment of more than a 6 percent return upon the entire volume of Hope's stock outstanding, both that which was issued for cash or other assets, and that which was issued

in stock dividends; and it amounts to 12.9 percent upon all such stock which was issued for cash or other assets.

Such an order, issued upon such a record as was before the Commission, does not call for the intervention of a court of equity, to prevent confiscation. The demand for such intervention must arise from a feeling that long acquiescence by the public in the collection of an unduly high return creates a vested right to demand a continuance of that happy experience.

## CONCLUSION.

Upon matters not argued in this brief, which are involved in this case, we concur on the argument made by counsel for the Federal Power Commission, and the Pennsylvania Public Utility Commission, Petitioners, filed herein.

The judgment below should be reversed.

Respectfully submitted on behalf of the National Association of Railroad and Utilities Commissioners.

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October 15, 1943.

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IN THE

# SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1943.

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FEDERAL POWER COMMISSION,
Petitioner,
vs.
HOPE NATURAL GAS COMPANY,
Respondent,
No. 34

CITY OF CLEVELAND,
Petitioner,
vs.
HOPE NATURAL GAS COMPANY,
Respondent.
No. 35

---

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT.

---

## APPLICATION FOR LEAVE TO FILE BRIEF, *AMICUS CURIAE*, and BRIEF AND ARGUMENT OF CITIES SERVICE GAS COMPANY, AS *AMICUS CURIAE*.

---

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IN THE

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Respondent.
} No. 35

---

## APPLICATION FOR LEAVE TO FILE BRIEF *AMICUS CURIAE.*

---

Comes now Cities Service Gas Company, applicant, and informs the Court:

I.

That Cities Service Gas Company is a private corporation, organized and existing under the laws of the State of Delaware, and is authorized to do business in the states of

Oklahoma, Texas, Missouri, Kansas and Nebraska; and owns and operates a natural gas production and transmission pipeline system extending from numerous fields in the states of Texas, Oklahoma, Kansas and Missouri to approximately 265 cities, towns and communities in the above mentioned states, the greater part of its business being the "sale in interstate commerce of natural gas for resale," and, with respect to such sales for resale, is subject to the rate-regulatory jurisdiction of the Federal Power Commission under Sections 4 and 5 of the "Natural Gas Act."

II.

That on October 20, 1939, the Federal Power Commission in its Docket No. G-141 instituted an investigation of the rates, charges and practices of said Cities Service Gas Company, upon which order hearings were begun on November 30, 1942 and concluded February 2, 1943; and which resulted in an interim order issued by said Commission on July 28, 1943.

In said interim order the Commission in making its determination of rate base excluded all evidence of "fair value" of the plant and property of this applicant; that had the Commission found a rate base upon present "fair value" of the property, plant and enterprise of the company, such rate base would have been greatly in excess of the so-called "actual legitimate cost" rate base so actually determined and adopted by the Commission in the amount of $48,567,756; that by the use of said rate base, as found by it, the Commission ordered an annual reduction in the revenues of Petitioner of $4,445,871; that such reduction could not have been ordered had the present "fair value" been determined and adopted by the Commission; that by reason of the rejection of the principle of present "fair value" as the rate base of said Cities Service Gas Company, the Commission could not validly determine whether or not the rates and charges of said Company were reasonable or unreasonable, or whether or not any reduction should be made therein, and, if made, the proper and legal amount thereof; and that by reason of all of which the rights of this company have been denied and violated.

That one of the decisive issues in said case as between

the Federal Power Commission and said Cities Service Gas Company was and is the denial and exclusion by the Commission of the governing principle of "fair value" in the determination of the rate base of this applicant. Said interim order (Docket No. G-141) in that behalf declares:

"Exclusion of 'Fair Value' Evidence.

"At the threshold, we are met with the Company's contention that the trial examiner improperly excluded evidence of reproduction cost and *so-called* 'fair value' of the properties. Our views as to why such evidence should be excluded have been stated in earlier opinions (Citing: Detroit v. Panhandle Eastern Pipe Line Company et al., 45 P.U.R. (n.s.) 203, 208-210; Re Chicago District Electric Generating Company, 39 P.U.R. (n.s.) 263, 269-272), and need not be amplified here."

*(Comm. Op. No. 95, p. 6.)*

* * * * *

"(3) No necessity was shown for the consideration in this proceeding of the Company's evidence of * * * 'fair value' of its property."

* * * * *

"(6) The actual legitimate cost before depreciation, within the meaning of Section 6(a) of the Natural Gas Act of the Company's gas plant used and useful, as of December 31, 1941, is not more than $66,977,654."

**Note:** After deduction therefrom of so-called "depreciation and depletion" as found by the Commission in the amount of $21,804,449, and the addition thereto of "construction work in progress" in the amount of $1,576,357, and "working capital" in the amount of $1,818,194, the resulting figure of $48,567,756 is designated and adopted by the Commission as the "rate base."

*(Comm. Order, Docket No. G-141, July 28, 1943, pp. 1, 2, 3.)*

III.

That, being dissatisfied with said interim order, said Cities Service Gas Company, in the manner provided by law, is reviewing said order of the Commission by appropriate proceedings now pending in the United States Circuit Court of Appeals for the Tenth Circuit, that being the Court having jurisdiction to review said order under the "Natural Gas

Act," which case is entitled and numbered as follows: "*No. 2813, Cities Service Gas Company, a Corporation, Petitioner, vs. Federal Power Commission, Public Service Commission of the State of Missouri, and the City of Kansas City, Missouri, Respondents.*"

IV.

That the exclusion of the principle and elements of present "fair value" is one of the decisive issues in the cause of *Federal Power Commission v. Hope Natural Gas Company*, (No. 34) in which this application is filed; for that in its said opinion and order now under review in this said cause, the Commission rejected and discarded the principle of "fair value" and adopted so-called "actual legitimate cost" as the rate base of Hope Natural Gas Company. The order of the Commission in that behalf finds and declares:

> "With the decline in favor of the doctrine of 'fair value' as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates."
>
> • • • • •
>
> "(18). For the purpose of determining just and reasonable rates for the future, the rate base represented by the actual legitimate cost of the Company's property used and useful in the production, transportation and sale of natural gas in interstate commerce (Finding (13)), plus inoperated acreage, working capital, and future net capital additions is $33,712,526."
>
> *(Comm. Opinion 76 and Order, Docket Nos. 100, 101, 127, 113, May 26, 1942, p. 4.)*

That said issue of "fair value" will be considered and determined by this Court in this said cause No. 34, as this applicant verily believes; and this applicant, in the protection of its own rights and in its own behalf, desires by brief *amicus curiae* to present said issue of present "fair value" to this Court, believing that the decision of this Court in this case will be conclusive of the same issue in applicant's case now pending as aforesaid, before the United States Circuit Court of Appeals for the Tenth Circuit.

V.

That the Solicitor General of the United States and Respondent, Hope Natural Gas Company, have consented to

the filing of brief by this applicant as *amicus curiae*, as herein prayed.

That Petitioner, Federal Power Commission, although requested so to do, has refused to accord its consent to the filing of such brief, *amicus curiae*. The consent of the City of Cleveland in Case No. 35 has not been obtained.

Wherefore, applicant, Cities Service Gas Company, respectfully prays that it be allowed to file its brief as *amicus curiae* upon the issue of present "fair value" as the controlling principle of "rate base" under the Natural Gas Act and the law of the land.

CITIES SERVICE GAS COMPANY,
By DONALD C. MCCREERY,
1217 First National Bank Bldg., Denver, Colorado.

A. M. EBRIGHT,
Bartlesville, Oklahoma.

ROBERT D. GARVER,
700 Scarritt Building,
Kansas City, Missouri.
Counsel.

State of Colorado,
City and County of Denver. } ss.

Donald C. McCreery, being first duly sworn, on his oath deposes and says: he is one of counsel for Cities Service Gas Company, applicant above named; that he is authorized by said Corporation to execute the foregoing application and this verification on behalf of said Corporation; that he has read and well knows the contents of said application; and that the matters and facts therein stated and contained are true, as he verily believes.

DONALD C. MCCREERY.

Subscribed and sworn to before me this 11th day of October, 1943.

MARGARET M. DUNCAN,
Notary Public.

My commission expires December 28, 1943.
(Notarial Seal)

IN THE

# SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1943.

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FEDERAL POWER COMMISSION,
Petitioner,
vs.
HOPE NATURAL GAS COMPANY,
Respondent,
No. 34

CITY OF CLEVELAND,
Petitioner,
vs.
HOPE NATURAL GAS COMPANY,
Respondent.
No. 35

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## BRIEF AND ARGUMENT OF CITIES SERVICE GAS COMPANY, *AMICUS CURIAE*.

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### The Principle of "Fair Value."

The concept of "value" is inherent in rate-regulatory control. Upon the exercise by government of the right to require that the rates of public utilities be "reasonable," it was found that the fundamental and necessary measure or test of such reasonableness was the amount or value of the property so devoted to the public service, for the use of which the utility is entitled to compensatory return.

In the application of the developing principles of rate regulation, the "value" of the utility property became the accepted and basic test of reasonableness of rates. *(Stone, et al. v. Farmers Loan and Trust Co.* (1886), 116 U. S. 307, 6 Sup. Ct. 334, 335, 345; *Dow, et al. v. Beidelman* (1888), 125 U. S. 680, 8 Sup. Ct. 1028, 1029, 1030, 1031.) Ten years later, in 1898, this Court in *Smyth, et al. v. Ames, et al.*, 169 U. S. 466, 18 Sup. Ct. 418, accepted the foundation of "fair value" theretofore established and applied as the rate base, and concerned itself with the appropriate and permissible evidence and procedure "to ascertain that value."

"It is the settled rule of this Court that the rate base is present value."

*United Railways v. West* (1930), 280 U. S. 234, 50 Sup. Ct. 123, 126;

*Los Angeles Gas & Electric Corp. v. Railroad Commission, et al.* (1933), 289 U. S. 287, 53 Sup. Ct. 637;

*Denver Union Stock Yard Co. v. United States et al.* (1938), 304 U. S. 470, 58 Sup. Ct. 990;

*Federal Power Commission v. The Natural Gas Pipeline Company* (1942), 315 U. S. 575, 590, 62 Sup. Ct. 736.

The principle of "fair value" in rate regulation is not the result of any one case; it is the course of decision and established fundamental law for more than half a century, declared and re-declared through the years by this Court and other Federal Courts.

Unless "fair value" as the rate base of a utility has been *constitutionally* and *authoritatively* discarded, it continues to be "the law of the land."

In this brief our discussion will be confined to the one point (not including the constitutional question), whether or not the principle of "fair value" as the rate base of a utility has been discarded and repudiated by law, that is, by the Federal Power Act, the Natural Gas Act, or otherwise.

**Rejection by Federal Power Commission of Principle of "Fair Value."**

The Federal Power Commission, in a series of decisions beginning with "*In the Matter of Chicago District Electric Generating Corporation*" *(July 16, 1941)*, 39 P.U.R. (n.s.) 263, and culminating with its latest decision "*In the Matter of Cities Service Gas Company*" (Commission Docket No. G-141, *July 28, 1943)* (not yet officially reported), under authority asserted to have been delegated to it by Congress in *Section 208* of the Federal Power Act, and in *Section 6* of the Natural Gas Act, has condemned the principle of "fair value" and substituted therefor that which is variously described by it as "actual legitimate cost," "prudent investment," and "net investment" rate base.

Whatever doubt there might be as to the definite purpose of the Commission and the precise meaning of the language employed by it *in the earliest of its decisions* above referred to, is now completely dissipated in its latest decision. We quote briefly from the several decisions in question:

In the *Chicago District Electric Generating Corporation* case *supra*, the Commission declared:

"* * * There is no difficulty whatever in ascertaining promptly and accurately from the books of the respondent the cost of, or the prudent investment in, its property.

"The answer to the problem of whether we have been authorized by Congress to disregard reproduction cost evidence in fixing the rate base is to be found in §208(a) of the Federal Power Act, 16 USCA §824g. That section provides:

" 'Section 208. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every public utility, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation, and the fair value of such property.'

"We are thus authorized, in the first instance, to investigate and ascertain the actual legitimate cost of the property of every public utility. We are likewise authorized to ascertain the depreciation therein. *It is when*

*we find it necessary for rate-making purposes in specific cases* that we may determine other facts bearing on the 'fair value' of such property.

* * * * *

"Congress clearly evinced a definite departure from the fair value doctrine of Smyth v. Ames. * * * *Congress recognized the fair value doctrine as an impediment to rate making.* * * *

* * * * *

"The facts in this proceeding are particularly appropriate for the determination of a rate base strictly on a prudent investment basis. *This is a situation peculiarly suitable for the application of the statutory power granted us* 'to escape the fog into which speculations based on Smyth v. Ames (1898), 169 U. S. 466, 42 L. Ed. 819, 18 S. Ct. 418, have enveloped the practical task of administering systems of utility regulation.'

* * * * *

"* * * We conclude, therefore, that the rate base in this case is the actual legitimate cost * * *." (Emphasis ours.)

*Re Chicago District Electric Generating Corp.*, 39 P.U.R. (n.s.) (1941), 263 at pp. 269, 270, 272.

In the *Panhandle Eastern Pipe Line Co.* case, the Commission said:

"Having been authorized by the Congress to determine in the first instance the actual legitimate cost of utility properties and the depreciation therein, we conclude that the rate base is the actual legitimate cost of the property used and useful in furnishing the service, * * *. It is certain from the record that no necessity exists requiring the consideration of other facts in determining a rate base in these proceedings. * * *"

*Detroit v. Panhandle Eastern Pipe Line Co.*, 45 P.U.R. (n.s.) (1942), 203, at p. 210.

In the *Hope Natural Gas Company* case, the Commission stated:

"*With the decline in favor of the doctrine of 'fair value'* as the only mode of public utility rate regulation, its keystone, reproduction cost, crumbles. Bona fide investment figures now become all important in the regulation of rates. * * *

* * * * *

"Accordingly, we begin with the book cost in the determination of the actual legitimate cost or investment in the facilities used in the company's interstate business. • • •

• • • • •

"After considering the evidence based upon the vouchers, books, and records of the company, and as a result of the application of fundamental principles of accounting, cost determination and equity, the Commission finds, in the words of §6(a) of the act, 16 U.S.C.A. §799(a) the actual legitimate cost. • • •

• • • • •

"This actual legitimate cost is predicated upon facts and it is the best evidence in these proceedings, so we will employ it for determining the proper and allowable rate base." (Emphasis ours.)

*Cleveland and Akron v. Hope Natural Gas Company*, 44 P.U.R. (n.s.) (1942), 1 at pp. 14, 15, 16.

In the *Cities Service Gas Company* case, *supra*, the Commission makes findings and orders *inter alia*, as follows:

"*Exclusion of 'Fair Value' Evidence.*

"*At the threshold, we are met with the Company's contention that the trial examiner improperly excluded evidence of* reproduction cost and *so-called 'fair value' of the properties.* Our views as to why such evidence should be excluded have been stated in earlier opinions (Citing: Detroit v. Panhandle Eastern Pipe Line Company et al., 45 P.U.R. (n.s) 203, 208-210; Re Chicago District Electric Generating Company, 39 P.U.R. (n.s.) 263, 269-272), and need not be amplified here."

*(Comm. Op. No. 95, p. 6.)*

• • • • •

"(3) No necessity was shown for the consideration in this proceeding of the Company's evidence of • • • 'fair value' of its property."

• • • • •

"(6) The actual legitimate cost before depreciation, within the meaning of Section 6(a) of the Natural Gas Act of the Company's gas plant used and useful as of December 31, 1941, is not more than $66,977,654."

**Note:** After deduction therefrom of so-called "deprecia-

tion and depletion" as found by the commission in the amount of $21,804,449, and the addition thereto of "construction work in progress" in the amount of $1,576,357, and "working capital" in the amount of $1,818,194, the resulting figure of $48,567,756 is designated and adopted by the Commission as the "rate base." (Emphasis ours.)

*(Comm. Order, Docket No. G-141, July 28, 1943, pp. 1, 2, 3.)*

It thus is made entirely clear from the quoted portions of the Commission opinion and order in the *Cities Service Gas Company* case, *supra*, that in excluding all evidence of "fair value," the principle of "fair value" was discarded and repudiated in its entirety. It is also now equally clear, from the citation in *The Cities Service Gas Company* opinion, of its earlier decisions above referred to, that the Commission intended from the outset to overrule completely the principle of "fair value" as well as the formula of "reproduction cost". The authority asserted thus to revolutionize the law of "rate base," the Commission, at sundry times, has sought to justify and legalize.

The numerous and inconsistent positions of the Commission (1935-1940, 1940, 1941-1943), with respect to the principle of "fair value," and the significant chronology thereof, are set forth in *Appendix D* hereto. This is done, not because that body possesses any legislative or judicial functions, for it is elementary that it does not have any such powers. The Commission, a mere administrative agency of government, is a creature of statute, with limited powers measured by "the ambit of the statutory authority," which Congress could and did delegate to it. *The very fact of the variant Commission contentions, however, does reflect the determination of the Commission, by direction and indirection, to re-make the established law of rate base.*

**Such Commission Rejection of "Fair Value" is Unauthorized by and Contrary to Provisions of the Natural Gas Act.**

The contention *presently relied upon by the Commission* is that, by *Section 6* of the Natural Gas Act (and similarly by *Section 208* of the Federal Power Act), established or authorized so-called "actual legitimate cost" as the rate base of utilities. To this contention we address ourselves.

*Section 6* of the Natural Gas Act is as follows:

"*Ascertainment of Cost of Property*".

"Section 6. (a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such cost or depreciation and the fair value of such property.

"(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction."

The Commission utilizes its own theories of rate base by construing the language of the section to mean that "fair value" is "gone with the wind" except "in specific cases" when original or historical cost is not available from the books of the utility. However, the normal and straightforward meaning of the language of the section, which as we will point out is the Congressional construction thereof, is that thereby the Commission is given a two-fold authority: (1) in connection with and to facilitate in the public interest its broad supervisory control under the Act over all "natural gas companies," whether or not subject to the Commission's rate-regulatory control, to ascertain certain facts with respect to every such "natural gas coinpany" (See *Amer. Tel. & Tel. Co. v. United States*, 299 U. S. 232, 237-242, 57 Sup. Ct. 170, 172-174); and (2) additionally, "for rate making purposes," (not merely and only "in specific cases") all facts "necessary" to be ascertained in such cases.

Under the Commission construction of *Section 6 (a)*, it never could be "found necessary" to "ascertain fair value," because "cost" obviously is as capable of estimate as is "fair value." In a cost appraisal where actual cost figures are not available, an estimate of cost properly may be made (*Amer. Tel. & Tel. Co. v. United States* (1936), 299 U. S. 232, 244, 57 Sup. Ct. 170). The effect of their argument is *totally* to eliminate "fair value." The argument thus refutes itself.

The Commission construction also carries with it the implied imputation (aside from the constitutional questions posed) that Congress manifested a legislative intent, **through indirection,** to outlaw "fair value" and clothe the Commission with authority to impose its so-called "actual legitimate cost" rate base.

We believe there is neither doubt nor ambiguity nor indirection in the congressional enactment. It is our conviction that an examination of what Congress was asked to do by the Power Commission, of what Congress in fact did, and of what Congress formally declared it was doing, conclusively, completely and finally disposes of the Commission contention that "fair value" was cast aside and so-called "actual legitimate cost" substituted therefor by *Section 208* of the Federal Power Act and by *Section 6* of the Natural Gas Act.

Accordingly, we direct consideration to that portion of the legislative history of the statutory language in question, which shows the following:

1. The draft of the section as prepared by and presented to the Congress by the Federal Power Commission *(Appendix A hereto,* pp. iii-iv).

2. The presentation to Congress, on behalf of the Commission, by *Commissioner Seavey* and *Commission Solicitor DeVane,* of the Commission proposal that "fair value" as the rate base be discarded and written out of the law of the land, and that so-called "actual legitimate prudent cost" be substituted by Congress therefor *(Appendix A hereto,* pp. v-xxi).

3. The direct, pointed and striking refusal of Congress so to adopt the proposal of the Power Commission, visually demonstrated by a *composite* of the section, *as proposed* by the Power Commission and *as enacted* by the Congress *(Appendix B hereto,* p. xxii).

4. The Joint Report of Senate and House Committees on Interstate Commerce re Natural Gas Act, showing that there was no slightest Congressional intention to depart from or discard "fair value" as the rate base of utilities *(Appendix C hereto,* pp. xxiv, xxv, xxvi-xxvii, xxix).

Numerous significant facts emerge from a consideration of the foregoing steps in the legislative action.

*Section 208* of the Federal Power Act, entitled "Ascertainment of Cost of Property," of which *Section 6* of the Natural Gas Act is an exact counterpart, except for the necessary substitution of the term "natural gas company" for the term "public utility," was drafted not by Congress but by the Federal Power Commission *(Appendix A hereto,* page ii). As so drafted (page iv) and urged before the Congress by Commission spokesmen (pages x-xvi, xvii-xxi), "actual legitimate prudent cost" was authorized as the rate base. *This proposal was rejected by Congress (Appendix B hereto,* p. xxii). The antithesis between the Commission proposal and the Congressional enactment is thereby made evident.

In the *Commission draft of Section 208* (originally numbered *211)* of the Federal Power Act, as prepared and presented to Congress by the Power Commission, there was included a third paragraph as follows:

> "(c) In determining just and reasonable rates, the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question."

By this subsection "actual legitimate prudent cost" was specifically made the rate base. It will be noted also that subsections (a) and (b) of the Section as drafted and proposed by the Commission, which were specifically "built up" to and coordinated into subsection (c), made the provisions of the section as a whole, including the "actual legitimate prudent cost" rate base in subsection (c), applicable to the entire Power Act. These subsections also provide that the ascertainment of cost shall be limited to "actual legitimate prudent cost" as the rate base and for all purposes of the Act. As drafted, the entire section is an express determination, declaration and fixation of a new statutory rate base, fundamentally inconsistent with the principle of "fair value." That was the very purpose and object of the Commission draft, as both Commissioner Seavey and Solicitor DeVane declared in insisting upon its enactment by Congress, *(Appendix A*, pp. v, x, xii, xvii-xviii, xx). The legislative policy thus proposed, posed directly the issue of the so-called "prudent cost rate base" as against the "fair value" rate base, under long established law *(Appendix A*

*hereto*, p. xix). In this connection we quote from the presentation of both Commissioner Seavey and Solicitor DeVane:

"I think probably I should refer to section 211 in its entirety, but particularly I want to address a few remarks to 211 (c).

"Section 211 authorizes the Commission to ascertain the actual prudent cost of the property of every public utility under its jurisdiction and to require the utilities to file inventories of their property and its cost. It directs the Commission to keep itself informed of the cost of all additions and betterments to utility property. And it provides that in determining just and reasonable rates, the Commission shall fix rates which will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question. Rate regulation must eventually be based on prudent investment. Recent decisions of the Supreme Court and the respect which the Court has always paid to the constitutional interpretations of the coordinate branches of the government afford grounds for hope that this highly desirable result will be accomplished if the Congress should now definitely adopt the prudent cost rate base. This would present the case to the Court in a new light with a declaration of national policy that it has never had before."

(*Appendix A*, pp. v, xviii.)

However, subsection (c) was stricken in its entirety by Congress. Moreover, there was also stricken by Congress the provisions of subsections (a) and (b) which constituted a "build-up" to and coordination of these subsections into the rate base structure set up in subsection (c). Subsections (a) and (b) were merged by Congress, and in the merged section there remained but one concept described by Solicitor DeVane as follows:

"• • • I directed your attention to 211 (a) this morning as being complementary to State regulation. Section 211 (a) will secure a body of information, which I think is most valuable in the administration of this act and as an aid to the State commissions in their regulation of consumers."

(*Appendix A*, p. xviii.)

And yet the Commission contends in its decisions, *supra*,

that the section *as passed by Congress*, containing no provision of any kind as to rate base, means identically the same thing as if the section as proposed by the Commission and as stricken by Congress had remained in the Act.

**Composite** of *Section 208* of the Federal Power Act, as proposed by the Power Commission and as enacted by Congress, will be found in Appendix B hereto (p. xxii).

Such composite is a visual demonstration of the important and decisive fact that the language of the *Commission draft* and the language of the *Congressional enactment* not only do not mean or state the same thing but also are divergent and inconsistent in intent, meaning and statement. *Congress after deliberate consideration has spoken specifically and authoritatively and its declaration of legislative policy and enacted law can not be ignored or explained away or repudiated.*

The Commission contention is directly contrary to that which the Joint Committee's Report *(Appendix C hereto,* page xxix) declared to be and obviously is the meaning of *Section 6(a)* of the Gas Act (and *Section 208* of the Power Act) as enacted. We quote from that Report:

> "Subsection (a) authorizes the Commission to investigate and ascertain the actual legitimate cost of property, depreciation and other necessary facts for rate making purposes."

The Committees evidently considered it desirable also to reflect the views on the legislation entertained by the "National Association of Railroad and Utilities Commissioners" and so incorporated in their Joint Report as in harmony with the views of the Committees, a resolution adopted by the Executive Committee of that Association, wherein, among other things, it is said:

> "The bill provides for regulation along recognized and more or less standardized lines. *There is nothing novel in its provisions, and it is believed that no constitutional question is presented.*" (Emphasis ours.)
>
> *(Appendix C hereto,* pages xxvi-xxvii.)

Clearly then Congress evinced no intent to authorize or establish the statutory rate base proposed by the Commis-

sion and thus discard "fair value". *Section 6*, as we have seen from the testimony of *Solicitor DeVane*, becomes a mere authorization to "investigate and ascertain" certain facts referred to by Congress.

> "There is, of course, no more persuasive evidence of the purpose of a statute than the words by which the legislature undertook to give expression to its wishes." *United States v. American Trucking Assns.* (1940), 310 U. S. 534, 543; 60 Sup. Ct. 1059, 1063.

Such is the record. Yet this Court is "asked to brush all this aside and simply to decree * * * anyway" that Congress, by *Section 6* of the Natural Gas Act and by *Section 208* of the Federal Power Act, intended to and did repudiate the principle of "fair value" as the rate base of electric utilities and natural gas companies. The issue is squarely presented whether or not Congress intended in *Section 6* to challenge, override or repudiate the principle of "fair value." If it did, that intention must affirmatively appear from the legislation itself or the authoritative meaning attributed to it by the Congressional Committees which managed the bill. The legislative record shows what was *proposed* by the Power Commission and why, also what was *in fact* enacted, and finally what the managing committees of Senate and House declared before its enactment to be the purpose and meaning of the statutory language. Congress flatly refused to do that which the Power Commission proposed. There is not one word from committees or members of Congress to the contrary.

As shown in *Appendix D* hereto, it was about five years (July 16, 1941) after the enactment of the Federal Power Act (August 26, 1935) that the Power Commission **for the first time,** declared that *Section 208* of the Power Act authorized it by fiat to discard the principle of "fair value." This is the meaning now attributed by the Commission to the language of its opinion *In the Matter of Chicago District Generating Corporation, supra,* (July 16, 1941), in the Commission opinion *In the Matter of Cities Service Gas Company, supra,* (July 28, 1941). No utility company, however cautious, during the elapsed interval of eight years since the passage of the Federal Power Act in 1935, could have

learned that the principle of "fair value" had been abrogated, for there is and has been no source of law from which it could ascertain that fact.

It is incredible, had Congress passed or intended to pass a law challenging or abrogating the well known and fully established course of "constitutional decision of this Court" as to "fair value," that it or its committees did not make "at least one clear statement of that purpose." On the other hand, the comparison of the legislation *as proposed* and *as enacted* discloses an express and specific legislative policy, determination and adjudication after extensive hearings, not to cast aside the principle of "fair value."

Nor can the Power Commission "sustain its position by a literal reading" or interpretative construction of the language of *Section 6(a) as enacted,* for therein is to be found not one word or phrase suggesting or remotely implying the repudiation of the principle of "fair value."

The Commission contention is a distortion, not a construction, of the section. The legislative history of the statute squarely conflicts with the Commission position.

We quote somewhat at length from the recent opinion of this Court announced by *Mr. Justice Jackson* in *Helvering v. Griffiths,* wherein the facts, circumstances, applicable reasoning and controlling rules of law are strikingly analogous to the situation here presented and accordingly are applicable in this discussion.

> "The question in this case is whether the Acts of Congress and the administrative regulations thereunder afford a basis on which we may reconsider the decision in Eisner v. Macomber, 252 U. S. 189, 40 S. Ct. 189, 64 L. Ed. 521, 9 A.L.R. 1570, and pass on the Government's request that it be overruled.
>
> * * * * *
>
> "The tax is asserted under the general provisions of §22(a) of the Internal Revenue Code, 26 U.S.C.A. Int. Rev. Code §22(a), that income includes 'dividends,' together with the specific provision of §115 (f) (1), 26 U.S.C.A. Int. Rev. Code §115 (f) (1), that: 'A distribution made by a corporation to its shareholders in its stock or in rights to acquire its stock shall not be treated

as a dividend to the extent that it does not constitute income to the shareholder within the meaning of the Sixteenth Amendment to the Constitution.'

"Was Congress thereby saying that such a dividend as we have here is not being taxed, in view of the Eisner v. Macomber decision, or was it saying that regardless of that decision it is being taxed? * * *

* * * * * *

"On March 3, 1936, the President had suggested the enactment of a tax upon the undistributed income of corporations. On March 26, 1936, and while the taxpayer's petition for certiorari in the Koshland case was pending, a Subcommittee of the House Ways and Means Committee recommended that such a tax be enacted in lieu of the existing capital-stock, excess-profits, and income taxes on corporations. It was thought by some authorities that imposition directly upon shareholders of a tax based on their pro rata shares of corporate earnings would be more satisfactory than the undistributed profits tax. Serious consideration of this method, which had been employed in earlier times, was foreclosed by the belief that Eisner v. Macomber made it 'impossible' to put into effect.

"The statements of members of Congress and of responsible Treasury officials at the hearings and debates on the Act *are at variance with the present assertion of the Government that Congress intended §115 (f) (1) to challenge or override the decision* to which it had in other sections of the Act accommodated itself.

* * * * * *

"In this state of affairs the Treasury issued Regulations which plainly construed §115 (f) (1) not as repudiating Eisner v. Macomber by taxing stock dividends but as exempting them and adopting the existing decisions, including Eisner v. Macomber.

* * * * * *

*"We think if Congress had passed or intended to pass an Act challenging a well known constitutional decision of this Court there would at least one clear statement of that purpose appear either from its proponents or its adversaries. Not one contemporaneous word in or out of Congress discloses the purpose which the Government says we should find that this legislation accomplished.*

"Against this background, it was proposed to incorporate an undistributed profits tax in the pending Revenue Act for 1938. As proposed and enacted, §115 (f) (1) was the same as in the 1936 Act. Like earlier Acts, the Revenue Act of 1938, as proposed and enacted, contained provisions intended to conform with the authority of Eisner v. Macomber, and it was attacked as embodying the principle of forcing the distribution of needed corporate assets. * * *

* * * * *

"* * * Despite these factors, *again there was not the slightest suggestion of the view that §115 (f) (1) had made or had intended to make all stock dividends taxable;* on the contrary there was continued recognition of the authority of Eisner v. Macomber. * * *

* * * * *

"*The Government says that the time has come when Eisner v. Macomber must be overruled,* and that we should construe §115 (f) (1) as intended to tax the dividends here in question and thus to require reconsideration of that decision. *It should be observed that the question of the constitutional validity of Eisner v. Macomber is plainly one of the first magnitude; but this is not to say that it is presented in this case. Under our judicial tradition we do not decide whether a tax may constitutionally be laid until we find that Congress has laid it. Unless the tax asserted by the Commissioner has been authorized by Congress it fails of validity before we even reach the constitutional question. To reach that question we must decide whether Congress intended by §115 (f) (1) to do what Eisner v. Macomber squarely held that it could not. We cannot find that it did.*

"The Government cannot sustain its position on a literal reading of §115 (f) (1). * * *

* * * * *

"*The administrative and legislative history of the statute squarely conflict with the Government's position in this case.*

* * * * *

"*We are asked to make a retroactive holding that for some seven years past a multitude of transactions have been taxable although there was no source of law from which the most cautious taxpayer could have learned of the liability.* If he consulted the decisions of this Court,

he learned that no such tax could be imposed; if he read the Delphic language of the Act in connection with existing decisions, it, too, assured him there was no intent to tax; if he followed the Congressional proceedings and debates, his understanding of nontaxability would be confirmed; if he asked the tax collector himself, he was bound by the Regulations of the Treasury to advise that no such liability existed. It would be a pity if taxpayers could not rely on this concurrent assurance from all three branches of the Government. *But we are asked to brush all this aside and simply to decree that these transactions are taxable anyway.*

* * * * *

"*We are unable to find that Congress intended* to tax the dividends in question, *and without Congressional authority we are powerless to do so.* That being the case, we cannot reach the reconsideration of Eisner v. Macomber on the basis of the present legislation and regulations."

*Helvering v. Griffiths* (March 1, 1943) ..... U. S. ....., 63 Sup. Ct. 636, 637, 639-640, 645, 645-646, 647, 648, 652-653, 653.

This Court speaking through *Mr. Justice Black* recently also has declared:

"Whether or not one agrees with the committees that the cited cases constituted an unduly restricted interpretation of the Clayton Act, one must agree that the committees and the Congress made abundantly clear their intention that what they regarded as the misinterpretation of the Clayton Act should not be repeated in the construction of the Norris-LaGuardia Act. *For us to hold, in the face of this legislation,* that the federal courts have jurisdiction to grant injunctions in cases growing out of labor disputes, merely because alleged violations of the Sherman Act are involved, *would run counter to the plain mandate of the act and would reverse the declared purpose of Congress.*"

*Milk Wagon Drivers' Union, etc. v. Lake Valley Farm Products, Inc., et al.*, 311 U. S. 91, 103, 61 Sup. Ct. 122, 128.

## Conclusion.

If as we believe conclusively appears from the record, there is no basis whatever "to find that Congress intended to challenge or override" the principle of "fair value," then this Court, as declared by it, *supra*, being "without Congressional authority" is "powerless to do so," for Congress by "the plain mandate of the act" has abundantly made clear its legislative policy and purpose in that respect.

Respectfully submitted,

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# APPENDIX A.

## Excerpts From Part I.

"HEARINGS BEFORE THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE, HOUSE OF REPRESENTATIVES, SEVENTY-FOURTH CONGRESS,

FIRST SESSION,
ON
H. R. 5423

TO PROVIDE FOR CONTROL IN THE PUBLIC INTEREST OF PUBLIC UTILITY HOLDING COMPANIES USING THE MAILS AND THE FACILITIES OF INTERSTATE COMMERCE, TO REGULATE THE TRANSMISSION AND SALE OF ELECTRIC ENERGY AND NATURAL GAS IN INTERSTATE AND FOREIGN COMMERCE, AND FOR OTHER PURPOSES."

(February-March, 1935)

Testimony of *Commissioner Clyde L. Seavey* of the Federal Power Commission:

"Title II of H.R. 5423, introduced by Congressman Rayburn, is entitled 'Amendments to Federal Water Power Act.' By these amendments the present act is divided into three titles. It is provided that the present Federal Water Power Act shall constitute title I of the amended Federal Power Act. The Rayburn bill does not contain all of the sections of the present act. It includes (pp. 77 to 102) only those sections which it proposes to amend. None of these amendments to the present sections of the act is of major significance; they are made largely for the purpose of clarifying its effect in situations which have arisen in the course of its administration. A separate memorandum explaining these amendments is submitted herewith. The present analysis is devoted to the new titles which are added by the bill (pp. 103 to 141). Of these new provisions title II (pp. 103-122) contains the substantive provisions for the regulation of interstate electric utilities, and title III (pp. 122 to 141) brings together the provisions applicable to both water power licensees under title I and interstate operating companies under title II, including the general administrative and procedural sections."

*(Page 384)*

• • • • •

"Mr. Wolverton: Did you participate in the drawing of this bill?

"Commissioner Seavey: Yes; I worked on it along with many others.

"Mr. Wolverton: Who were the others?

"Commissioner Seavey: They were the legal department, our legal department, and members of the Commission, and our engineers were consulted about certain practical phases; our accountant was consulted, and generally, so far as the Commission is concerned, we took in the whole staff of the Commission.

"Now, in addition to that, together we consulted the chairman of this committee, Mr. Rayburn; discussed the policies and the provisions of the bill, and also consulted the legislative counsel and Dr. Splawn. I do not know whether I can remember anybody else or not."

*(Page 400)*

Testimony of *Dozier DeVane,* Solicitor, Federal Power Commission:

"Mr. Wolverton: Who actually sat down and drafted that language? Do you know? You know in the drawing of any bill it finally comes down to one individual or two individuals, who actually express the policies and ideas by the use of words. Who did that as to article II?

* * * * *

"Mr. DeVane: Commissioner Seavey and myself, of the Federal Power Commission, were the two persons to whom the Commission delegated the responsibility for this work. I would like to say, however, that to neither of us belongs the credit, if we may call it credit, for the language that is in the bill, because we have had a great deal of assistance from members of the Commission and from members of its staff. This title has been worked over very seriously and very earnestly."

*(Pages 552-553)*

## DRAFT OF FEDERAL POWER ACT AS INTRODUCED IN CONGRESS.

TITLE II. "AMENDMENTS TO FEDERAL WATER POWER ACT" (Amendments as proposed by Power Commission, indicated by italics).

"Section 201. Section 3 of the Federal Water Power Act is amended to read as follows:

* * * * *

"(13) 'net investment' in a project means the actual legitimate *prudent* original cost thereof * * *"

"Sec. 4. The Commission is hereby authorized and empowered—

* * * * *

"(b) To determine the actual legitimate *prudent* original cost of and the net investment in a licensed project, * * *"

*(Pages 24-25, 452)*

*Note:* The foregoing amendments were rejected by Congress

**Comment:** It is important to note that when Congress did intend to authorize the utilization of a rate base other than the rate base of "fair value," it did so in language directly, expressly and unmistakably declaring such policy. Thus in the *Federal Water Power Act of 1920 (41 Stat. 1063, 16 U.S.C. 791-823)*, "the valuation" of the property of any licensee "for purposes of rate making" *(Section 20)*, as well as for acquisition thereof by the Government *(Section 14)* is expressly limited to the "net investment" which is not "to exceed the fair value of the property taken" *(Section 14)*, as defined and limited to "actual legitimate original cost" *(Section 3 (13))*. Every license issued under the Act is "conditioned upon the acceptance by the licensee" of such rate base and valuation *(Section 6)*.

This is the only instance in which Congress has supplanted the principle of "fair value." It raised no constitutional obstacle, for if any person desired to avail himself of the license *privileges* of the *Water Power Act*, he *voluntarily* accepts at the outset the "terms and conditions" under which the United States is willing to permit the exercise of such privileges *(Alabama Power Co. v. Federal Power*

*Comm.*, 128 F. (2d) 280, 287). This is both logical and just under the very special circumstances involved in the development of hydro-electric "projects" on the "public lands," "reservations" and "navigable waters" *(Section 3 (1), (2), (8))*, over all of which the United States exercises the prerogative of proprietorship as well as that of sovereignty *(Light v. United States*, 220 U. S. 523, 31 Sup. Ct. 485).

PART II. "REGULATIONS OF INTERSTATE ELECTRIC COMPANIES ENGAGED IN INTERSTATE COMMERCE."

*Commission Draft of Bill:*

"Ascertainment of Cost of Property.

"Sec. 211. (a) The Commission shall have power to ascertain for the purposes of this title and title III the actual legitimate prudent cost of the property of every public utility, and every fact which in its judgment may or does have any bearing on the determination of such cost.

"(b) The Commission may require any public utility to file with it an inventory of all or any part of the property of the utility and of the original cost thereof, including only those elements of cost that may be considered for purposes of determining just and reasonable rates under the provisions of this title and title III and the rules and regulations of the Commission. The Commission shall keep itself informed regarding the cost of all additions, betterments, extensions, and new construction of the property of every public utility.

"(c) In determining just and reasonable rates, the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question.

*(Page 35)*

Testimony of *Commissioner Seavey:*

"Section 211 authorizes the Commission to ascertain the actual prudent cost of the property of every public utility under its jurisdiction and to require the utilities to file inventories of their property and its cost. It directs the Commission to keep itself informed of the cost of all additions and betterments to utility property. And it provides that in determining just and reasonable rates, the Commission shall fix rates which will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question. Rate regulation must eventually be based on prudent investment. Recent decisions of the Supreme Court and the respect which the Court has always paid to the constitutional interpretations of the coordinate branches of the Government afford grounds for hope that this highly desirable result will be accomplished if the Congress should now definitely adopt the prudent cost rate base. This would present the case to the Court in a new light with a declaration of national policy that it has never had before."

"Section 301 authorizes the Commission to prescribe the forms of all accounts and records to be kept by licensees and public utilities and to inspect and examine the accounts and records so kept. This section is in substance the same as the provisions of the Interstate Commerce Act applicable for many years to telegraph and telephone companies and reenacted in the Communications Act passed by the last Congress. Such accounting control is essential to the compilation of a uniform body of information about the industry needed for the efficient administration of the act."

"Section 202 of the bill amends section 4 of the Water Power Act. This section consists of a general enumeration of the commission's powers. The present subsection (a) contains a reference to the commission's determination of the net investment of the licensee in a project, but the power to make such determination is left to implication and not expressly granted. While its power to do so has been upheld in a suit brought by the Clarion River Power Co. (59 Fed. (2d) 861, certiorari denied 287 U. S. 639), this amendment is designed to remove continued controversy on the subject. Subsection (a) is divided into two subsections, the second, lettered (b), containing the

grant of power 'to determine the actual legitimate prudent original cost' of a licensed project. The word 'prudent' is added here and consistently throughout the act as a qualification of the cost to be determined by the commission for purposes of recapture and rate making. The Water Power Act was the first congressional repudiation of the unstable 'fair value' rule; the net investment in the project is the sum to be paid on recapture and the amount to be used as a rate base. Consistent application of this theory requires the qualification that all costs allowed must have been prudently incurred. The commission interprets the present act in this way, but this interpretation has not been reviewed by the courts and the amendment is desired to eliminate the possibility of doubt on the subject."

"Mr. Wolverton. Speaking on the question of rates, throughout this bill, in different sections, there is this statement, or these words used:

Actual legitimate prudent original cost.

"Can you explain to me what those words mean?

"Commissioner Seavey. You are referring to—(Note—Water Power Act)

"Mr. Wolverton. Well, it occurs in section 202, subdivision (b), in order that you may have the exact wording, but it is used frequently in the bill.

"In other words, the Federal Power Commission is authorized to determine the actual legitimate prudent original cost.

"I am wondering why all of those terms are used, and whether one qualifies the other, or whether they are to be used in conjunction with one another. I have never observed that sort of a basis before.

"Commissioner Seavey. They are used as a composite. The present act contains all of those words except 'prudent'.

"Mr. Wolverton. Well, then, it ought to be very easy for you to explain to me what the meaning of it is, if the act already has it. What is the difference between actual and legitimate, or between legitimate and prudent?

"Commissioner Seavey. The actual cost of a property

might not be a legitimate cost, because of fraud or collusion, or other things that make it not a legitimate cost.

"Now, that is entirely different from actual cost.

"Mr. Wolverton. I can see how the Commission might be asked to pass upon and to determine a matter based upon actual cost, or legitimate cost, or prudent, or original cost, but when you get the combination together I am wondering what the net result will be.

"Commissioner Seavey. That combination, the actual effect is if they are legitimate; the actual cost if they are prudent.

"Mr. Wolverton. All right. You come to the word 'original' cost. Where does that fit into the picture?

"Commissioner Seavey. And, it must be the original cost of the facilities that are concerned. That is, the cost, the original cost, would be different than if some one later on after these facilities had been used or constructed came along and paid a price for them, and instead of using the price that may have been paid at some later date, this provision provides, and the present act provides, that the original cost of it shall be used.

"Mr. Wolverton. And, you say the word 'prudent' is something new?

"Commissioner Seavey. Yes.

"Mr. Wolverton. What is the reason for putting 'prudent' in?

"Commissioner Seavey. The word 'prudent' is put in there to clarify, to make positive, the interpretation that the Federal Power Commission has placed upon the present provisions, which do not include 'prudent.' They have put the interpretation that legitimate original actual cost means prudent cost, and have been proceeding on that theory.

"In order to remove any question about the interpretation of the Commission in the matter, this amendment is offered.

"Mr. Wolverton. I guess you have used enough words.

"Commissioner Seavey. I beg your pardon?

"Mr. Wolverton. There are enough words there, but as to clearness of meaning, I am not certain.

"Commissioner Seavey. This applies only to licensed projects which later on may be recovered by the Federal Government.

* * * * *

"Mr. Huddleston. Mr. Seavey may I direct your attention to the rule of rate making on page 117, subsection (c). (Note: Sec. 211)

"Commissioner Seavey. Yes.

"Mr. Huddleston. Where did that come from?

"Commissioner Seavey. Where did that come from?

"Mr. Huddleston. Where did you take that from?

"Commissioner Seavey. That approximately comes, not wholly from, and is the basis upon which the rates are fixed in California. There is added to these requirements which are not in the California statute, but which exist by administration, in the belief that they should be allowed a return upon a value controlled by the prudent cost of the property.

"Mr. Huddleston. There is nothing like this in the Federal (Water) Power Act.

"Commissioner Seavey. This, in a modified form, is now in the power act.

"Mr. Huddleston. Will you refer us to it?

"Commissioner Seavey. Sections 19 and 20 of the Federal (Water) Power Act.

"Mr. Huddleston. We do not have that before us here. Will you be kind enough to read it for the record?

"Commissioner Seavey. I will read those two sections. I do not know whether I can read out that part. Perhaps I shall read the whole section.

"Mr. Huddleston. Just the part, if you can, that prescribes the rule of rate making.

"Commissioner Seavey. Well, I will read the whole section: section 20 is as follows:

'Sec. 20. That when said power or any part thereof shall enter into interstate or foreign commerce the rates charged and the service rendered by any such licensee, or by any subsidiary corporation, the stock of which is owned or controlled directly or indirectly

by such licensee, or by any person, corporation, or association purchasing power from such licensee for sale or distribution or use in service shall be reasonable, nondiscriminatory, and just to the customer and all unreasonable discriminatory and unjust rates for services are hereby prohibited and declared to be unlawful; and whenever any of the States directly concerned has not provided a commission or other authority to enforce the requirements of this section within such State or to regulate and control the amount and character of securities to be issued by any of such parties or such States are unable to agree through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor, or on the amount or character of securities to be issued by any of said parties, jurisdiction is hereby conferred upon the Commission upon complaint of any person aggrieved, upon the request of any State concerned, or upon its own initiative to enforce the provisions of this section, to regulate and control so much of the services rendered, and of the rates and charges of payment therefor as constitute interstate or foreign commerce and to regulate the issuance of securities by the parties included within this section, and securities issued by the licensee subject to such regulations shall be allowed only for the bona fide purpose of financing and conducting the business of such licensee.

'The administration of the provisions of this section, so far as applicable, shall be according to the practice and procedure in fixing and regulating the rates, charges, and practices of railroad companies as provided in the act to regulate commerce, approved February 4, 1887, as amended, and that the parties subject to such regulation shall have the same rights of hearing, defense, and review as said companies in such cases.

'In any valuation of the property of any licensee hereunder for purposes of rate making, no value shall be claimed by the licensee or allowed by the Commission for any projects or projects under license in excess of the value or values prescribed in section 14 hereof for the purpose of purchase by the United States, but there shall be included the cost to such licensee of the construction of the lock or locks or other aids of navigation and all other capital expenditures required by the United States, and no value shall

be claimed or allowed for the rights granted by the Commission or by this act.'

"Mr. Huddleston. That is very different from this provision or rule of rate making you have in subsection (c) here.

"Commissioner Seavey. Well—

"Mr. Huddleston. It is wholly and fundamentally different both in principle and in detail, is it not?

"Commissioner Seavey. Well, but it requires as a rate base approximately the same as is required here.

"Mr. Huddleston. May I venture to differ from your construction.

"This gives as a rule of rate making a single factor for consideration a fair return upon the actual legitimate prudent cost of the properties and so forth.

"Commissioner Seavey. Yes.

"Mr. Huddleston. That factor—

"Commissioner Seavey (interposing). It does not—

"Mr. Huddleston (continuing). That factor in the rule that you have read as now in force as section 20 of the power act is merely one among a number of factors to be considered.

"Commissioner Seavey. I would like to say that it does not exclude the use of other factors, but it limits, it limits the amount that the Commission may allow to a reasonable return upon the legitimate cost.

"Mr. Huddleston. The law that you have read.

"Commissioner Seavey. Yes.

"Mr. Huddleston. Again, I venture to differ from you.

"Commissioner Seavey. That is my interpretation, and not being an attorney—

"Mr. Huddleston (interposing). I am interested in this rule from two points of view: First, because I have very grave doubts as to its constitutionality on that. As you have said, that you are not a lawyer, and I will not interrogate you; but I am wondering whether you consider this a proper rule of rate making.

"Commissioner Seavey. I can only say this, as to its constitutionality—

"Mr. Huddleston (interposing). I do not want to discuss that with you, as you are not a lawyer. You would not help me, if you are not a lawyer, on that.

"Commissioner Seavey. I just want to refer you to the fact that the California commission in the Los Angeles Electric case, which went before the Supreme Court did fix a return upon the prudent historical cost and it was sustained, by the Supreme Court. There were other elements that went in, but that was the basis for the fixation of the rates.

"Mr. Huddleston. I accept your opinion for whatever it may be worth, as you are not a lawyer.

"Commissioner Seavey. I am fortunate not to be a lawyer, sometimes.

"Mr. Huddleston. It is dangerous to venture an opinion about something you have not made a study of.

"Now, I am interested in and the second point of interest to me is this, whether you consider this a proper rule of rate making. I will value your opinion on that.

"Commissioner Seavey. Yes; I do. I believe that investments in legitimate securities that are based upon the historical prudent cost of properties should be protected by a return upon that direct investment.

"Mr. Huddleston. And that is the only factor you think should be considered in making rates?

"Commissioner Seavey. Oh, there are many other things that are considered.

"Mr. Huddleston. You have not put them in this rule.

"Commissioner Seavey. No; I think it is not necessary to put them in there.

"Mr. Huddleston. You have confined the Commission, by this rule, to a single factor.

"Commissioner Seavey. That is true. That is true.

"Mr. Huddleston. They are not allowed to make rates at any more or any less than will yield a fair return upon the cost.

"Commissioner Seavey. The Commission would be

limited to allowing at least a fair return upon the cost; but that is on the lower limit; that is a minimum requirement.

"Mr. Huddleston. The rules do not say so. The rule says that the Commission shall accept whatever may be a fair return as the sole basis in fixing a rate. It does not allow anything on fair value, nor allow anything for depreciation, obsolence, and other factors of that kind.

"Commissioner Seavey. Let us see—not being a lawyer, I cannot read it and interpret it properly—but, let me read this:

> '(c) In determining just and reasonable rates, the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question.'

"That is a minimum requirement.

"Mr. Huddleston. Where do you get the word 'minimum'? That is not in here.

"Commissioner Seavey. Because that is what the language says.

"Mr. Huddleston. You have just as much authority to say that it is a 'maximum' as a 'minimum.' As a matter of fact, I think it is both minimum and maximum. It is absolute. It allows no latitude for variation. You must do this particular thing and nothing else.

"Commissioner Seavey. I would be gratified if your interpretation is right, because that is the way I believe it should be, but it was not my idea of the provision there that that was so limited.

* * * * *

"Mr. Huddleston. You are familiar with the rule of rate making as laid down in the leading case of *Smyth v. Ames*, I suppose?

"Commissioner Seavey. I have read it, but I do not want to express a legal opinion on it.

"Mr. Huddleston. That is all.

"Mr. Wolverton. Before we leave that, Mr. Commissioner, I would like to ask the question what do you consider prudent.

"Commissioner Seavey. What do I consider prudent?

"Mr. Wolverton. Yes.

"Commissioner Seavey. As a Commissioner, I would consider prudent—you mean of what a prudent cost might be? I would consider that it would be a sound judgment upon the facts that are presented for the consideration of the Commission that is sitting and passing upon what is a prudent cost.

"Mr. Wolverton. Would you judge whether a man had acted prudently or not by the conditions which prevail at the time the matter is before you for determination, or when he had exercised the judgment?

"Commissioner Seavey. No; it would have to be predicated upon the conditions that existed at the time that he made his judgment.

"Mr. Wolverton. That is helpful, because it would be very hard for some of us to qualify as prudent today, if judged by what we did a few years ago.

"Commissioner Seavey. Yes; it would be absolutely unfair and inequitable to try to determine the prudent cost of something that was built in 1920 upon 1935 conditions.

"Mr. Wolverton. The determination of the actual cost would be a very simple matter, would it not?

"Commissioner Seavey. Well, not so simple sometimes, but it is simple as compared with other determinations.

"Mr. Wolverton. I would assume that it is far easier to determine actual cost than it would be to determine prudent cost.

"Commissioner Seavey. Yes; it is.

"Mr. Wolverton. What do you mean by legitimate?

"Commissioner Seavey. I thought I made that plain.

"Mr. Wolverton. You did give an explanation.

"Commissioner Seavey. I would say that again—I think you are an attorney and I am not—

"Mr. Pettengill. He is a former prosecuting attorney.

"Commissioner Seavey. I believe legitimate as used in the present law comprehends a reasonable determina-

tion of a reasonable cost. That is, that it comprehends that a judgment shall be passed as to the reasonableness of the cost. Of course legitimate can be confined very specifically to a definition that you could make for it which might eliminate anything except a legal cost, that is, a cost that was not fraught with fraud or collusion; but I believe that the way that word is used in the Federal power act at the present time, taking into consideration all of the provisions of the act, that it does comprehend that a reasonable cost should be determined and that legitimate has a broader meaning than what it might be confined to if you used a restrictive definition.

"Mr. Wolverton. For that reason I asked you what the term 'legitimate' meant.

"Commissioner Seavey. Yes.

"Mr. Wolverton. I wish to know whether it has a legal significance, or whether it has a broader significance than you have indicated.

"Commissioner Seavey. I think it has a broader and I am sorry I misunderstood your first question.

"Mr. Wolverton. Upon the basis that you have defined legitimate, what is the difference between 'legitimate' and 'prudent'?

"Commissioner Seavey. I do not believe there is very much, but in order to make it sure, we wanted to include that word 'prudent' in the definition.

"Mr. Wolverton. If you are very anxious to make it sure, I would suggest that you use that embellishment that has so recently come into use 'and/or'. I have never quite understood what it meant, if you miss anything then it is covered by that.

"Commissioner Seavey. Well, I do not like those two words either, and neither does the Commission, I guess, and neither did those who drafted the original Water Power Act, so they are running them all together as a composite picture of what they want to accomplish.

"Mr. Wolverton. In this definition, in section 211, the words used are 'actual legitimate prudent cost of the property.'

"Commissioner Seavey. Yes.

"Mr. Wolverton. In the section to which I directed

your attention the word 'original' is used after 'prudent.'

"Why was it used in one place and not in the other?

"Commissioner Seavey. Now, let me get your question. You are referring to—

"Mr. Wolverton. I think it was section 294 to which I first made reference.

"Commissioner Seavey. Oh, one is the water power, the present Water Power Act, and amendments to it, and the other is the regulatory act.

"Mr. Wolverton. Then you feel that there was a purpose in leaving out the word 'original' in one instance?

"Commissioner Seavey. Yes.

"Mr. Wolverton. What was the purpose in leaving it out?

"Commissioner Seavey. Leaving out 'original'?

"Mr. Wolverton. Yes. You understand what I mean. The first section to which I called your attention used 'actual legitimate prudent original cost.'

"Commissioner Seavey. Yes.

"Mr. Wolverton. Now, this other section uses the words 'actual legitimate prudent' and you have directed my attention to the fact that there is a difference in the application of the two sections. For that reason I am asking what is the difference that requires the use of 'original' in one instance and not in the other?

"Commissioner Seavey. You wish to know why in the Federal Water Power Act proper 'original' was used and in the regulatory act 'original' is not used.

"Mr. Wolverton. Yes.

"Commissioner Seavey. Now, from a regulatory standpoint, we do not believe that it is necessary to have that limitation of 'original', because sometimes it is almost impossible to find original cost. Under the water power act the original cost is under the immediate direction of a commission. That is, the construction is made through a license issued, and the contract is made so that so far as the original cost is concerned, that can be determined; but in regulatory matters some of these utilities go back for years. You cannot determine the

original costs and I am not sure that you wish to determine them, if a legitimate prudent price was paid for the property.

"Mr. Wolverton. Well, that confirms what I have had in my mind, actual and original does not mean much from the standpoint which you have given because legitimate and prudent overshadows 'actual or original cost.'

"Commissioner Seavey. It might; there is no question about that.

"Mr. Wolverton. I am inclined to think it would, from the way you look at it.

"Commissioner Seavey. I think it should; I think it would; yes.

"Mr. Wolverton. So from the standpoint of this bill in fixing the basis of rates, we could leave out 'actual' and 'original', and under your theory just let it be determined by legitimate and prudent?

"Commissioner Seavey. Legitimate prudent cost; yes.

"Mr. Wolverton. So the words 'actual' and 'original' are just surplusage.

"Commissioner Seavey. I do not think 'actual' in the new matter there has added very much to it, because that would be controlled—

"Mr. Wolverton (interposing). I do not think it does either, under the view you have expressed.

"Commissioner Seavey. I agree with you."

*(Pages 386, 388, 399-400, 411-414, 414-416)*

Testimony of *Solicitor DeVane*, Federal Power Commission:

"Mr. DeVane. The next amendment will be found on page 5—I beg your pardon—on page 4, under paragraph No. 13. (Note: Water Power Act.)

'(13) "net investment" in a project means the actual legitimate prudent original cost thereof.'

"The word 'prudent' is the new word in that subsection.

"Mr. Pettengill. Is there court authority for that word?

"Mr. DeVane. How is that, sir?

"Mr. Pettengill. Is there court authority for putting that word in?

"Mr. DeVane. Well, we have court authority to the extent that the word has been defined; yes, sir.

"Mr. Pettengill. Well, what does it add to the meaning of the law as it now exists?

"Mr. DeVane. It adds this to the act: The experience of the Commission has shown that in hearings to determine the cost of licensed projects the position is frequently taken that under the definition as used in the act as it is today, the Commission can exercise no control over the expenditures made, no matter how imprudent they are, if the licensee can prove that the expenditures were actually made, and we are unable to show fraud or collusion.

"Now, I might say that the Commission has held to the contrary. The Commission insofar as present licensees are concerned, has already held that expenditures that were improperly made could be disallowed and that it was not necessary to show fraud or collusion in order to disallow them.

"The purpose of this amendment is to stop the licensees from continuing to make that contention in future cases. This amendment, of course, can have no effect upon licenses that have already been issued.

* * * * *

"Mr. DeVane. I endeavored to show on yesterday, how this act would be a complement to State regulations of local rates. I call the committee's attention to section 211 page 116 of the bill, in which the Commission is given the authority to ascertain for the purpose of this title, and title III of title II, the actual legitimate prudent cost of properties of every public utility subject to its jurisdiction. Then I mentioned paragraph (b) of that section, which is merely procedural and gives the Commission access to information for the determination of such costs; and then I was right at the point of asking the committee to permit me to postpone any discussion of subsection (c) of that section at that time—

"Mr. Bulwinkle. You mean subsection (c)?

"Mr. DeVane. Subsection (c) of that section, at this time, because that relates to the powers of this Com-

mission in connection with the fixing of rates and what I am trying to do at this time, before I discuss those matters, is to get clearly before the committee the plan of this bill.

"When I have done that, I think we can discuss these legal questions that you may ask me, with a little better understanding.

* * * * * *

"Mr. DeVane. Yes; in connection with that, may I refer to section 211 (c), on page 117; section 211 (c).

"I think probably I should refer to section 211 in its entirety, but particularly I want to address a few remarks to 211 (c).

"Section 211 authorizes the Commission to ascertain the actual prudent cost of the property of every public utility under its jurisdiction and to require the utilities to file inventories of their property and its cost. It directs the Commission to keep itself informed of the cost of all additions and betterments to utility property. And it provides that in determining just and reasonable rates, the Commission shall fix rates which will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question. Rate regulation must eventually be based on prudent investment. Recent decisions of the Supreme Court and the respect which the Court has always paid to the constitutional interpretations of the coordinate branches of the government afford grounds for hope that this highly desirable result will be accomplished if the Congress should now definitely adopt the prudent cost rate base. This would present the case to the Court in a new light with a declaration of national policy that it has never had before.

"Now, I direct your attention to the provisions of section 202 which is merely declaratory of the common-law principle that rates shall be just and reasonable. I directed your attention to 211 (a) this morning as being complementary to State regulation. Section 211 (a) will secure a body of information, which I think is most valuable in the administration of this act and as an aid to the State commissions in their regulation of consumers.

"Section 211 (c) provides that in determining just and reasonable rates—I wish to call attention to the way this section is drawn, and to state it has been drawn in this

manner to make sure, as we believe, of its constitutionality. 'In determining just and reasonable rates the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question.'

"You will observe the section does not say that the Commission shall allow a fair return upon the prudent cost of the property, nothing more or less, but in determining just and reasonable rates, the rates fixed shall be such as will allow a fair return upon the actual legitimate prudent cost.

"The Commission allows what is a fair return, and it cannot go below that, could not fix rates that would allow less than a fair return upon the actual legitimate prudent cost of the property.

* * * * *

"Mr. Wolverton. What will be the net result, the difference in fixing the rate upon a basis of the 'actual legitimate prudent original cost,' as compared with the rate fixed on the 'fair value of the property'?

"Mr. DeVane. What is the advantage—

"Mr. Wolverton (interposing). What will the net result or difference be?

"Mr. DeVane. I cannot say what the result will be.

"Mr. Wolverton. Do you anticipate that it will be a higher rate or a lower rate?

"Mr. DeVane. I anticipate that it will make for lower rates, yes.

"Mr. Wolverton. Notwithstanding the fact that the securities of the companies have all been issued on the basis of rates fixed on a fair valuation of the property?

"Mr. DeVane. No; I do not admit that as a fact; I do not think that securities have been issued on the basis of the fair value of the property. I think in a great many cases you will find securities far exceed the fair value of the property, and I think in other cases you will find that the securities are considerably less.

In theory of the law the amount of securities outstanding has nothing to do with rates, because in fixing the rate you are supposed to disregard the securities.

"Mr. Wolverton. Would the use of the term 'fair value' which has a very definite meaning, as the result of construction by many courts, including the Supreme Court of the United States, preclude the Federal Power Commission from doing the very thing that is to be accomplished—you are supposed to do—by the use of the four words, 'actual legitimate prudent original'?

"Mr. DeVane. Would it preclude them from reaching the same result?

"Mr. Wolverton. Yes.

"Mr. DeVane. In rate cases?

"Mr. Wolverton. Yes.

"Mr. DeVane. No, it would not preclude them from doing it.

"Mr. Wolverton. Then why the necessity for changing the words which are commonly used if the Commission can arrive at the same result by using a term which has had the court's construction?

"Mr. DeVane. I am glad you asked that question, Mr. Wolverton. If you directed the Commission to determine rates on the fair value of the property it would mean that in each one of these rate cases it would be necessary to employ a good many people; it would be necessary for the Commission to spend thousands of dollars; it would impose upon the operating company the necessity of spending $2 to $5 to each one the Commission spent in determining the fair value, and when you got through, in my opinion, you would not have reached a materially different result from that which would be reached in this way. Rates can be determined in this manner at a minimum cost to everyone. After the first determination of the money that is prudently invested in any property, rate investigations will not cost five cents the dollar that is now spent under the present method of fixing rates.

"Mr. Wolverton. Would it not be just as costly to determine what was the actual legitimate prudent original cost as it would be to determine what was the fair value?

"Mr. DeVane. No. And the difference is this: The determination of cost is made once, and it continues thereafter as a fact. The determination of values, as the utilities can show to you is a shifting thing; it is never still; it is never permanent; it is one thing this year and

it is something else another year; it requires a determination to be made in every rate case; what is done in one rate case is thrown out of the window in the next rate case.".

*(Pages 461-462, 518, 572-573, 573-575)*

## APPENDIX B.

### COMPOSITE OF SECTION 208 (ORIGINALLY NUMBERED 211) OF THE FEDERAL POWER ACT AS PROPOSED BY THE POWER COMMISSION AND AS ENACTED BY CONGRESS.

The *italicized* language, together with the language of the text, *not stricken,* constitutes the section of the Act in question, *as enacted by Congress.*

The *italicized* language, together with the language of the text *as stricken,* constitutes the section as drafted by the Federal Power Commission, submitted by it to Congress, with extensive supporting discussion, *but rejected by Congress.*

(a) *The Commission* ~~shall have power to ascertain for the purposes of this title and title III~~ may investigate and ascertain *the actual legitimate* ~~prudent~~ *cost of the property of every public utility,* the depreciation therein, and when found necessary for rate-making purposes, ~~and every fact which in its judgment may or does have any bearing~~ other facts which bear *on the determination of such cost* or depreciation, and the fair value of such property.

(b) ~~The Commission may require any~~ every *public utility* upon request shall ~~to~~ *file* ~~with it~~ with the Commission *an inventory of all or any part of* ~~the~~ its *property* ~~of the utility~~ and a statement of the original cost thereof, ~~including only those elements of cost that may be considered for purposes of determining just and reasonable rates under the provisions of this title and title III and the rules and regulations of the Commission. The Commission~~ and *shall keep* ~~itself~~ the Commission *informed regarding the cost of all additions, betterments, extensions, and new construction* of the property of every public utility.

(c) ~~In determining just and reasonable rates, the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question.~~

## APPENDIX C.

**75th Congress, 1st Session.**

**Calendar No. 1210. Senate Report No. 1162.**

**INTERSTATE TRANSPORTATION AND SALE OF NATURAL GAS.**

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August 9 (calendar day, Aug. 11), 1937.
Ordered to be Printed.

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Mr. Wheeler, from the Committee on Interstate Commerce, submitted the following

### REPORT

[To accompany H. R. 6586]

The Committee on Interstate Commerce, to whom was referred the bill (H. R. 6586) to regulate the transportation and sale of natural gas in interstate commerce, and for other purposes, having considered the same, report thereon with a recommendation that it pass without amendment.

Report No. 709 on the bill (H. R. 6586) explains well and analyzes thoroughly the bill. The Committee on Interstate Commerce feel there is nothing they wish to add to this report which for the benefit of the Senate is herewith appended.

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[H. Rept. No. 709, 75th Cong., 1st sess.]

The Committee on Interstate and Foreign Commerce, to whom was referred the bill (H. R. 6586) to regulate the transportation and sale of natural gas in interstate commerce, and for other purposes, having considered the same, report thereon with a recommendation that it pass.

It was originally introduced as H. R. 4008.

#### General Purposes of the Bill.

The bill is substantially identical with H. R. 12680 which, as amended, was reported by the Committee on Interstate and Foreign Commerce of the Seventy-fourth Congress, second session, with a recommendation that it pass. If enacted, the present bill would for the first time provide for the regulation of natural-gas companies transporting

and selling natural gas in interstate commerce. It confers jurisdiction upon the Federal Power Commission over the transportation of natural gas in interstate commerce, and the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use. The States have, of course, for many years regulated sales of natural gas to consumers in intrastate transactions. The States have also been able to regulate sales to consumers even though such sales are in interstate commerce, such sales being considered local in character and in the absence of congressional prohibition subject to State regulation. (See *Pennsylvania Gas Co. v. Public Service Commission* (1920), 252 U. S. 23.) There is no intention in enacting the present legislation to disturb the States in their exercise of such jurisdiction. However, in the case of sales for resale, or so-called wholesale sales, in interstate commerce (for example, sales by producing companies to distributing companies) the legal situation is different. Such transactions have been considered to be not local in character and, even in the absence of Congressional action, not subject to State regulation. (See *Missouri v. Kansas Gas Co.* (1924), 265 U. S. 298, and *Public Service Commission v. Attleboro Steam & Electric Co.* (1927) 273 U. S. 83.) The basic purpose of the present legislation is to occupy this field in which the Supreme Court has held that the States may not act.

In 1934 24 States produced natural gas, and 35 States consumed it. The annual sale of natural gas in that year amounted to 1,764,988,000,000 cubic feet. The sale of this gas brought a revenue of $394,000,000. Of this amount, about $260,000,000 was in payment for gas transported in interstate commerce. During 1935 there was some increase in the pipe-line mileage and in the transportation of natural gas in interstate commerce.

The average price per thousand cubic feet for domestic use was 74.6 cents; for commercial use, 49.6 cents; and for all other industrial uses, 16.9 cents. This gas was consumed by 7,600,000 customers.

There are today substantially in excess of 50,000 miles of gas pipe lines in the United States. While natural gas has been in use for 50 years or more in this country, and while there was some transportation in interstate commerce prior to 1926, the substantial development in the industry has occurred since that year.

The bill provides for regulation of the exportation and importation of natural gas and authorizes the Commission to ascertain the cost of property used in rendering service; to direct extension or improvement of transportation facilities, and require the interconnection of facilities; to regulate the abandonment of service; to prescribe a uniform system of accounts; to determine proper depreciation rates; to fix rates and charges for natural gas sold for resale for ultimate public consumption; to investigate compacts between the States; to compile information relative to the effect and operation of any compacts between the States; and to make investigations and report to Congress respecting the natural-gas industry. The bill takes no authority from State commissions, and is so drawn as to complement and in no manner usurp State regulatory authority, and contains provisions for cooperative action with State regulatory bodies. Mr. John E. Benton, general solicitor of the National Association of Railroad and Utilities Commissioners, and other representatives of State commissions and municipalities, appeared at the hearing before the committee in support of the bill.

The general attitude of the State regulatory commissions was indicated in a communication from Mr. Benton to the chairman, House Interstate and Foreign Commerce Committee, under date of March 29, 1937, enclosing a copy of a resolution adopted by the executive committee of the National Association of Railroad and Utilities Commissioners on March 26, 1937, as follows:

National Association of Railroad and Utilities Commissioners,

Washington, D. C., March 29, 1937.

Hon. Clarence F. Lea, Chairman, House Interstate and Foreign Commerce Committee, Washington, D. C.

Dear Sir: A joint meeting of the executive committee of this association and of the association's committee on legislation was held on March 26, 1937, for the consideration of legislative matters.

The provisions of H. R. 4008 were considered for the purpose of determining whether that bill will provide regulation of the character requested in the resolution heretofore adopted by this association, and presented at the hearing on March 24, 1936. Consideration was also given to the situation existing in Illinois, where the Illinois Com-

mission finds itself impeded by injunction proceedings in the Federal courts in its undertaking to discover what it costs the interstate pipe-line company to deliver gas in Illinois, although the commission is seeking that information only for the purpose of determining what the reasonable expenses of the local distributing company ought to be, and what price for gas sold in the Chicago areas should be approved by the commission as just and reasonable.

A resolution was unanimously adopted endorsing H. R. 4008, amended as requested on behalf of this association at the hearing on March 24. I attach a copy of the resolution hereto, and ask that it be printed as if presented at the hearing.

Yours very truly,

JOHN E. BENTON, General Solicitor.

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"Resolution Adopted by the Executive Committee of the National Association of Railroad and Utilities Commissioners on March 26, 1937.

"*Resolved by the executive committee of the National Association of Railroad and Utilities Commissioners,* That the position of said association declared by resolution at its forty-seventh annual convention, in favor of the enactment of Federal legislation providing for the regulation of the interstate transmission and sale of gas at wholesale for resale is hereby reaffirmed; and

"*Resolved further,* That for the purpose of providing such regulations said association endorses H. R. 4008, an act to regulate the transportation and sale of natural gas in interstate commerce, introduced by Congressman Lea, of California, with the amendments proposed thereto at the hearing before the House Interstate and Foreign Commerce Committee on behalf of the association on March 24, 1937; and

"*Resolved further,* That the necessity for such regulation is increasingly imperative, and that the enactment of H. R. 4008, amended as proposed, at the present session of Congress is earnestly urged on behalf of said association."

The bill provides for regulation along recognized and more or less standardized lines. There is nothing novel in

its provisions, and it is believed that no constitutional question is presented.

Your committee believes that this legislation is highly desirable to fill the gap in regulation that now exists by reason of the lack of authority of the State commissions.

In view of the importance of section 1 (b), which states the scope of the act, it seems advisable to comment on certain provisions appearing therein. It will be noted that this subsection of the bill, after affirmatively stating the matters to which the act is to apply, contains a provision specifying what the act is not to apply to, as follows: "but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas."

The quoted words are not actually necessary, as the matters specified therein could not be said fairly to be covered by the language affirmatively stating the jurisdiction of the Commission, but similar language was in previous bills, and, rather than invite the contention, however, unfounded, that the elimination of the negative language would broaden the scope of the act, the committee has included it in this bill. That part of the negative declaration stating that the act shall not apply to "the local distribution of natural gas" is surplusage by reason of the fact that distribution is made only to consumers in connection with sales, and since no jurisdiction is given to the Commission to regulate sales to consumers the Commission would have no authority over distribution, whether or not local in character.

It was urged in connection with earlier bills that there should be inserted at the end of this subsection a proviso as follows:

"*Provided*, That nothing in this Act shall be construed to authorize the Commission to fix the rates or charges to the public for the sale of natural gas distributed locally."

In order to avoid misunderstanding the committee thought it necessary to omit this proviso from the present bill for the following reasons, even though there is entire agreement with the intended policy which would have prompted its inclusion: First, it would have been surplusage if interpreted as it was intended to be interpreted, and, second, it would have been, in all likelihood, a source of confusion if in-

terpreted in any other way. For example, it was felt that in the effort to find a reason for its inclusion it might have been argued that it exempted sales to a publicly owned distributing company, and such an exemption is not, of course, intended. It is believed that the purposes of this proviso, assuming the need for any such provision, are fully covered in the present provision by the language—"but shall not apply to any other * * * sales of natural gas."

## Sectional Analysis of the Bill.

### Section 1. Necessity for Regulation of Natural-Gas Companies.

Subsection (a) contains a declaration of policy, states the necessity for Federal regulation, and defines the scope of that regulation. The subsection declares that the business of transporting and selling natural gas in interstate and foreign commerce for ultimate distribution to the public is affected with a public interest.

Subsection (b) confers jurisdiction upon the Commission over the transportation of natural gas in interstate commerce and the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use.

### Section 2. Definitions.

This section contains definitions of (1) "person", (2) "corporation", (3) "municipality", (4) "State", (5) "natural gas", (6) "natural-gas company", (7) "interstate commerce", (8) "State commission", and (9) "Commission" and "Commissioner". The definitions as they appear are self-explanatory and necessary to the proper administration of the bill.

### Section 3. Exportation or Importation of Natural Gas.

This section provides that after 6 months from the date of enactment no person may export or import natural gas without express approval of the Commission, such approval to be granted unless such exportation or importation will not be consistent with the public interest.

### Section 4. Rates and Charges; Schedules; Suspensions of New Rates.

Subsection (a) imposes upon natural-gas companies the duty of charging just and reasonable rates; and, under the

provisions of subsection (b), undue preferences or advantages are prohibited.

Subsection (c) requires the filing of schedules and contracts relating to all rates and charges subject to the jurisdiction of the Commission; and, under the provisions of subsection (d), no change may be made in such rates except after 30 days' notice.

Subsection (e) authorizes the Commission to hold hearings concerning the lawfulness of any proposed change in rates, and to suspend such rates for not over 5 months, pending such hearing. If the Commission investigation has not been completed before the rates go into effect, the Commission may require the natural-gas company to make refunds if the increase is not approved; and it is provided that adequate bond be furnished to that end. The burden of proof is placed upon the natural-gas company to justify any increase in rates, and the hearing and decision of such matters is given preference over other matters pending before the Commission.

Section 5. Fixing Rates and Charges; Determination of Cost of Production or Transportation.

Subsection (a) authorizes the Commission, after a hearing initiated by it, or upon complaint, to fix charges and reasonable rates for any transportation or sale subject to its jurisdiction.

Subsection (b) authorizes the Commission upon its own motion, or upon the request of a State commission, to investigate and determine the cost of production or transportation of natural gas in cases where the Commission has no authority to establish a rate governing the transportation or sale of such natural gas. This subsection applies only to cases involving transportation of natural gas in interstate commerce and will greatly aid State commissions in their rate-making proceedings.

Section 6. Ascertainment of Cost of Property.

Subsection (a) authorizes the Commission to investigate and ascertain the actual legitimate cost of property, depreciation, and other necessary facts for rate-making purposes.

Subsection (b) requires every natural-gas company upon request to file with the Commission an inventory of its

property, and a statement of the original cost thereof, and to keep the Commission informed regarding additions, betterments, extensions, and new construction.

Section 7. Extension of Facilities; Abandonment of Service.

Subsection (a) authorizes the Commission to direct a natural-gas company to extend or improve its facilities, and to establish physical connection and sell natural gas to any person or municipality engaged, or legally authorized to engage, in the local distribution of natural or artificial gas to the public, upon a finding that such an action is necessary or desirable in the public interest, but does not give the Commission authority to compel such extension or establishment of physical connection when to do so would impair the ability of the natural-gas company to render adequate service to its existing customers or involve the enlargement of transportation facilities.

Subsection (b) requires approval of the Commission by any natural gas company desirous of abandoning any or all of its facilities subject to the jurisdiction of the Commission. The Commission is authorized to approve such abandonment if it finds that the available supply of natural gas is depleted to the extent that the continuance of service is unwarranted or that the present or future public convenience or necessity permits such abandonment.

Subsection (c) provides that no natural-gas company shall undertake the construction or extension of any facilities for the transportation of natural gas to a market in which natural gas is already being serviced by another natural-gas company, or acquire or operate any such facilities or extensions thereof, or engage in transportation by means of any new or additional facilities, or sell natural gas in any such market without a certificate of public convenience and necessity from the Commission. There is a proviso that a natural-gas company already serving a market may enlarge or extend its facilities for the purpose of supplying the increased market demands in the territory in which it operates. There are similar provisions requiring certificates of public convenience and necessity for extensions of service in the Interstate Commerce Act (U. S. C., 1934, title 49, sec. 1 (18-20); the Communications Act of 1934 (U. S. C., 1934, title 47, sec. 214), and the Motor Carriers Act (U. S. C., 1934, title 49, secs. 306, 307, 308).

### Section 8. Accounts, Records, and Memoranda.

Subsection (a) requires natural-gas companies to make and keep such accounts, records, and memoranda as the Commission may direct. However, natural-gas companies are not relieved by this subsection from the duty of keeping such accounts as may be prescribed under the laws of any State.

Subsection (b) authorizes the Commission to inspect and examine accounts, records, and memoranda of natural-gas companies and to have access to the premises of such companies when necessary for that purpose.

Subsection (c) subjects the accounts of any person who controls, directly or indirectly, a natural-gas company, subject to the Commission's jurisdiction, to examination by the Commission.

### Section 9. Rates of Depreciation.

The Commission is authorized to require proper depreciation accounting and to determine and fix adequate depreciation rates, such rates to include amortization. The depreciation charges which a State commission may fix for rate purposes would not be affected by this section.

Subsection (b) requires the Commission to receive and consider the views of State commissions before prescribing depreciation rates.

### Section 10. Periodic and Special Reports.

The Commission by this section is authorized to require periodic and special reports which may be necessary for the proper administration of the act, and prescribe the manner and form in which the reports shall be made. It is declared to be unlawful for any person willfully to hinder or obstruct the making or filing of any information, report, or account required to be made, filed, or kept by the Commission.

### Section 11. State Compacts; Reports On.

Subsection (a) imposes the duty upon the Commission to assemble pertinent information with reference to the subject matter of any proposed compacts between two or more States, and requires the Commission to make such information public and report the same to the Congress, together with such recommendations for further legislation as appear to be appropriate or necessary to carry out the

purposes of such proposed compact and to aid in the conservation of natural-gas resources within the United States.

Subsection (b) requires the Commission to assemble and keep current pertinent information with respect to the effect and operation of any compact between the States heretofore or hereafter approved by the Congress, and to make such information public and report to the Congress and make such legislative recommendations as are appropriate to promote the purposes of such compact.

Subsection (c) authorizes the Commission to avail itself of the services, records, and information of the various departments and agencies of the Government, and authorizes the President to direct that such services and facilities of such agencies be made available to the Commission.

Section 12. Officials Dealing in Securities.

This section makes unlawful personal profit by an official or a director of a natural-gas company through the negotiation, hypothecation, or sale of any security issue by any such company.

Section 13. Complaints.

Under this section any State, municipality, or State commission may complain to the Commission of anything done or omitted to be done by any natural-gas company in contravention of the provisions of the bill.

Section 14. Investigations by Commission; Attendance of Witnesses; Depositions.

The Commission is authorized by subsection (a) to investigate any violation of the provisions of the Natural Gas Act, and may make available to State commissions and municipalities any information concerning the matters to which the bill relates.

Subsection (b) provides that the Commission may, after a hearing, determine the adequacy or inadequacy of the gas reserves held or controlled by any natural-gas company or by anyone on its behalf, including its owned or leased properties or royalty contracts, and may also, after hearing, determine the propriety and reasonableness of the inclusion in operating expenses, capital, or surplus, of all delay rentals or other forms of rental or compensation for unoperated lands and leases.

Subsections (c) and (d) provide for the issuance of subpenas and the attendance of witnesses, and in the event of refusal to attend or produce books or records, the Commission is given recourse to the courts. A willful failure to attend as a witness or to produce books or records is made a misdemeanor, punishable by fine of not more than $1,000 or imprisonment of not more than 1 year, or both.

Subsections (e), (f), and (g) authorize the taking of testimony by deposition, either in the United States or in a foreign country. Witnesses before the Commission and witnesses giving depositions as well as the person taking the deposition are entitled to the same fees as are paid for like services in the courts of the United States.

No person is excused from giving testimony because it may be self-incriminating, but under subsection (h) the person so testifying may not thereafter be subject to any penalty or forfeiture for or on account of any transaction or thing concerning which he is compelled to testify or to produce evidence. This exemption does not, however, relieve a party from prosecution for perjury.

Section 15. Hearings; Rules of Procedure.

Subsection (a) provides that hearings under the Natural Gas Act may be held before the Commission or any member or representative designated by the Commission. It authorizes the Commission to admit as a party to any proceeding any interested State, State commission, municipality, or private party in accordance with such rules and regulations as the Commission may prescribe.

Subsection (b) authorizes the Commission to adopt rules of practice and procedure governing all its hearings and proceedings. It provides also that no informality in any proceeding shall invalidate an order or regulation issued under the authority of the act.

Section 16. Administrative Powers of Commission; Rules, Regulations, and Orders.

This section contains a general grant of administrative powers to perform necessary acts, issue orders, rules, and regulations and prescribe the form of documents to be filed with the Commission.

Section 17. Use of Joint Boards; Cooperation with State Commissions.

Subsection (a) provides that the Commission may refer any matter arising in the administration of the act to a board to be composed of a member or members from the State or each of the States affected or to be affected by such matter.

Subsection (b) authorizes the Commission to confer with any State commission regarding rate structures, costs, accounts, charges, practices, classifications and regulations of natural-gas companies, and to hold joint hearings with any State commission in connection with any matter with respect to which the Commission is authorized to act.

Subsection (c) provides that the Commission shall make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies, and further provides that the Commission may, when it can do so without prejudice to the efficient and proper conduct of its affairs, make available to a State commission, upon request, any of its trained rate, valuation, or other experts, as witnesses subject to reimbursement of their compensation and traveling expenses.

Section 18. Appointment of Officers and Employees.

This section authorizes the Commission to appoint experts without regard to civil-service laws and other employees subject to the civil-service laws, and to fix salaries in accordance with the Classification Act of 1923.

Section 19. Rehearings; Court Review of Orders.

Subsection (a) authorizes parties to a proceeding before the Commission to apply for a rehearing within 30 days after the issuance of an order by which such party is aggrieved. The Commission is given power to abrogate or modify its order upon such application. Unless it acts upon the application within 30 days, the application may be deemed to have been denied. No proceeding for court review of an order of the Commission is to be brought unless an application for rehearing shall have been filed.

Subsection (b) provides for review of the Commission's orders by the circuit courts of appeals and the Court of Appeals of the District of Columbia. No objection to any order is to be considered by the court unless it was urged before the Commission in the application for rehearing.

unless there was reasonable ground for failure to raise it on the application. Findings of the Commission as to the facts, if supported by substantial evidence, are made conclusive, but the court may upon application order additional evidence to be taken before the Commission. The judgment of the court is subject to review by the Supreme Court of the United States upon certiorari or certification.

Section 20. Enforcement of Act; Regulations; and Orders

This section authorizes the Commission to bring a civil action in the proper district court to enjoin acts or practices in violation of the act or any rule, regulation, or order thereunder and to enforce compliance therewith.

Subsection (b) confers upon the courts of the United States jurisdiction to issue writs of mandamus commanding compliance with the act and rules, regulations, or orders thereunder.

Subsection (c) authorizes the Commission to employ such attorneys as it needs for its legal work.

Section 21. General Penalties.

Subsection (a) imposes a criminal penalty of fine, imprisonment, or both upon any person who willfully and knowingly violates the provisions of the act.

Subsection (b) provides for a fine for violations of the rules, regulations, and orders issued under authority of the act.

Section 22. Jurisdiction of Offenses; Enforcement of Liabilities and Duties.

This section imposes appropriate jurisdiction upon the courts of the United States over cases arising under the act.

Section 23. Separability of Provisions.

This is the usual separability section saving the rest of the act in case of a decision holding any part invalid.

Section 24. Short Title.

The act may be cited as the "Natural Gas Act".

(Emphasis added.)

## APPENDIX D.

### COMMENT UPON AND ANALYSIS OF VARIANT POSITIONS AND CONTENTIONS OF FEDERAL POWER COMMISSION WITH RESPECT TO THE PRINCIPLE OF "FAIR VALUE" AS THE RATE BASE OF ELECTRIC AND GAS UTILITIES.

During the eight-year period from the effective date of the Federal Power Act (August 26, 1935) and the effective date of the Natural Gas Act (June 21, 1938) to the present time, the Federal Power Commission has taken various and divergent positions in its decisions, reports, briefs and other public announcements, as to the proper and lawful rate base of those utilities over which it has rate-regulatory control under the Federal Power Act and the Natural Gas Act. The eight-year period, under the circumstances, divides itself into three shorter intervals, to-wit: (A) Years 1935-1940, (B) Year 1940, and (C) Years 1941-1943.

#### (A) YEARS 1935-1940.

During this period the Power Commission accepted the principle of "fair value" as controlling, and made no contention that Congress, either in the Federal Power Act or in the Natural Gas Act, abrogated the principle of "fair value" or established, or authorized the Commission to establish, the so-called "actual legitimate prudent cost" rate base. This is evident from the following:

(1) The Commission, reporting for the year 1935, declares:

> "The Public Utility Act of 1935 deals with a twofold problem. In title I of the new statute the Congress has asserted its jurisdiction over the financial structure and practices of holding-company systems with a view to the elimination of the economic burdens which holding-company control had placed upon local operating utilities. In title II the Congress has established regulatory control over the interstate activities of electric utilities which were beyond the constitutional or effective administrative control of the States, and has set up machinery for Federal assistance to State regulatory bodies in their efforts to accomplish effective public regulation.
>
> "*New Powers Conferred Upon the Commission.*"
>
> "The authority to fix rates over that part of interstate energy which is sold wholesale for resale is one of the

powers conferred by title II upon the Commission. This power was held to be beyond the authority of the States by the United States Supreme Court in *Public Utilities Commission v. Attleboro Company,* 273 U. S. 83. The object of this provision is to insure reasonable wholesale rates and to prevent interstate companies from discriminating in favor of consumers of one State at the expense of consumers of another State. The act does not give the Federal Commission any authority over local rates for electric service, this function being reserved exclusively to the States."

*Annual Report, 1935, Federal Power Commission, pp. 1-2.*

(2) The Commission, reporting for the year 1937, states:

*"Prudent Investment Rule in Rate-Making Urged Upon the Supreme Court."*

"During the past generation the growth of public utility operations has raised complex administrative problems not the least of which has been the evolution of an adequate workable rule for fixing some base upon which to predicate fair rates of return that would insure financial stability to operating companies and provide consumers with efficient service at reasonable rates. The fact that no adequate and workable rule has been evolved has been due in large part to an interpretation placed by the Supreme Court upon the fair value of utility property for rate-making purposes, in a line of decisions starting with the case of *Smyth v. Ames,* decided in 1898.

"As this issue, important alike to this Commission and to State regulatory agencies throughout the country, was involved in the case of *Railroad Commission of the State of California v. Pacific Gas and Electric Company,* pending before the United States Supreme Court, the Federal Power Commission, by leave of the Court, was permitted to file a brief *amicus curiae,* and its general counsel to appear in oral argument when the case was heard on November 11, 1937.

"This Commission entered the case for the purpose of defending the constitutionality of the prudent investment principle and to urge that the Court reverse the doctrine of *Smyth v. Ames,* adopted 39 years ago, *which requires consideration of reproduction cost as an element in de-*

*termining the fair present value of utility property for rate-making purposes.*

* * * * *

"Under the Federal Water Power Act of 1920 public utility companies securing license *were required to consent* to the use of net investment (the statutory equivalent for prudent investment) in the licensed project as a rate base in those situations in which the Commission could prescribe rates. The amendment of 1935 placing under the jurisdiction of the Commission interstate electric utilities did not expressly prescribe prudent investment as the base for rate-making purposes, but if the Supreme Court should approve as constitutional the theory of rate making for which the Commission is contending, the language of the amendment of 1935 would be sufficiently broad to enable the Commission to apply the prudent investment rule in fixing those rates which it is authorized to regulate.

"The Commission pointed out that since the Commission is standing on the threshold of a new era of Federal regulation involving an industry which for the first time has been subjected to the regulatory power of the Congress and is faced with the important function of rate making, it is deeply concerned in the establishment of a legal principle which will be consistent with and not obstructive to a sound administration of the rate-making power.

"The position taken by the Commission is that *if it is to be required under the Constitution, in fixing electrical rates to consider reproduction cost as an essential element in the determination of a rate base,* its administrative task will be well-nigh impossible of performance. It expressed the belief that a sound basis—sound in administration, in economics, and in law—upon which the public utility properties should be valued for rate-making purposes is the prudent investment in those properties, and that such a basis is entirely consistent with the requirements of the 5th and 14th Amendments of the Constitution.

"It was urged upon the Supreme Court that the rule of *Smyth v. Ames,* however much it may have been justified when applied to the facts of another generation, has no

justification in economics or in law when applied to the realities of the present day." (Emphasis ours.)

*Annual Report, 1937, Federal Power Commission, pp. 10-11.*

(3) The Commission, reporting for the year 1938, says:

"The decision of the Supreme Court in the case of *Railroad Commission of the State of California v. The Pacific Gas and Electric Co.*, in which the Commission filed a brief *amicus curiae*, and its general counsel participated in oral argument, adopted the view which the Commission had urged upon the Court that the Railroad Commission of California, in refusing to give any probative weight to evidence of reproduction cost in determining the proper rate base, had not deprived the Pacific Gas and Electric Co. of due process of law. The Supreme Court remanded the case to the District Court with instructions to make findings as to whether the rate fixed by the State Commission resulted in confiscation of the company's property. It is extremely significant that upon remand the District Court held that the rate base fixed by the Railroad Commission of California, without giving effect to evidence of reproduction cost of the company's properties, was a proper basis upon which to permit the company a reasonable rate of return."

*Annual Report, 1938, Federal Power Commission, pp. 30-31.*

(4) The Commission in its decision in case of *City of Los Angeles v. Nevada-California Electric Corp.*, Jan. 25, 1940, 32 P.U.R. (n.s.) 193, in determining a rate base and fixing the rates of the corporation therein involved, *did not declare, and so obviously had not then discovered, as now claimed,* that five years earlier in 1935 Congress had discarded the principle of "fair value" as the utility rate base under Section 208 of the Federal Power Act. The Commission, at page 203 of 32 P.U.R. (n.s.) declares:

"However, we believe the original cost of construction of the Boulder canyon line is the best evidence of the amount to be used as a rate base in this proceeding."

The Commission cites in support of this conclusion: *Clark's Ferry Bridge Co. v. Pennsylvania Public Service Commission* (1934), 291 U. S. 227, 54 S. Ct. 427, wherein this

Court held, in recognition of the governing principle of "fair value," that under the facts in that case the "reasonable cost of the structure furnished a proper basis for determining its *fair value.*" (Emphasis ours.)

**Comment:** Thus, as late as the early portion of the year 1940, the Power Commission had not undertaken to outlaw "fair value" either in its annual reports or in its decisions.

**(B) YEAR 1940.**

The Commission, reporting for the year 1940, proclaims:

"Space does not permit an extended discussion of all the details inherent in the regulatory problem. *Suffice it to say that the complications resulting from the 'fair value' theory, with its reproduction costs, its going value, its observed depreciation, etc., pose but a part of the problem which constantly confronts those charged with the responsibility for making regulation reasonably effective in the public interest.*

"The machinery for handling the regulatory problem cannot safely be confined to old methods. The regulatory agency is in fact a 'tribune of the people' designed to 'furnish protection to rights and obstacles to wrongdoing which, under our new social and industrial conditions, cannot be practically accomplished by the old * * * procedures' used in dealing with adversary suits in the law courts.

* * * * *

"The following important developments in rate making policy are reflected in the Commission's formal decisions issued during the last year:

"1. *The insistence by the Commission on a prudent investment rate base.*" (Emphasis ours.)

*Annual Report, 1940, Federal Power Commission, pp. 13, 62.*

**Comment:** It is to be observed that in 1940 the Commission, in seeking to revolutionize the law of rate base, *was undertaking to do so on its own power.* It is significant that *at that time* no contention was made that the governing principle of "fair value" had been cast aside and abrogated in the Federal Power Act (1935) or the Natural Gas Act (1938).

**(C) YEARS 1941-1943.**

(1) Thereafter, beginning with the case of "*In the Matter of Chicago District Electric Generating Corporation,*" *supra* (July 16, 1941), the decisions of the Commission departed radically from its own previous announcements, as well as the law of the land. The Commission, *In the Matter of Cities Service Gas Company* (July 28, 1943) (not officially reported—Comm. Docket No. G-141) expressly excludes and discards all evidence of "fair value," under the asserted authorization of Section 6(a) of the Natural Gas Act, and declares, by its reference to *The Matter of Chicago District Electric Generating Corporation, supra,* that such also was the intent and effect of its earlier ruling in that case.

(2) However, and strangely, in 1942, in the two extensive briefs filed by the Commission in this Court, in *Federal Power Commission v. Natural Gas Pipeline Company,* 315 U. S. 575, wherein the Commission renews extensively its attacks upon "the doctrine of *Smyth v. Ames*" (See *Railroad Comm. v. Pacific Gas & Electric Co.* (1938), 302 U. S. 388; *Driscoll v. Edison Light & Power Co.* (1938), 307 U. S. 104), no slightest suggestion was made that Congress, *as now contended,* had established or authorized the so-called "actual legitimate prudent cost" rate base and discarded and abrogated "fair value" as the controlling principle, in the Federal Power Act and the Natural Gas Act.

(3) Counsel for the Power Commission (George Slaff), appearing before the Public Utility Section of the American Bar Association in August, 1942, asserted in reliance on the special concurring opinion of Justices Black, Douglas and Murphy in the *Natural Gas Pipeline Company* case, *supra* (March 16, 1942), that fair value had been discarded and abrogated in that case. This assertion is made despite the statement of the Justices: "As we read the opinion of the Court, the Commission is now freed from the compulsion of admitting evidence on reproduction cost, or of giving any weight *to that element of fair value.*" (Emphasis ours.) Commission Counsel declared with finality:

"I look forward with avid anticipation to the gymnastics—intellectual or otherwise—with which some of you

here who represent the industry may attempt to dispel the rigor mortis of fair value which set in on March 16, 1942."

It seems evident that Counsel was not certain of his conclusions as to the force and effect of this Court's opinion in that case. Perhaps he had read the significant language of *Chief Justice Stone*, speaking for six members of the Court, who at page 590 of 315 U. S. declared: "*The total value* of the companies' plant, including equipment in excess of immediate needs when beginning business, has been included in the rate base adopted." (Emphasis ours.) For here is the express recognition of the application of the principle of value in that case.

And so later in his address we find Counsel declaring:

"*Consider first the pattern set by the Federal agencies.* No one can avoid the plain unvarnished fact that as far as both the Federal Power Commission and the Securities and Exchange Commission are concerned, fair value has been relegated to the limbo of outmoded doctrines." (Emphasis ours.)

**Comment:** Not Congress nor the Courts, but "the federal agencies," identified as the Federal Power Commission and the Securities and Exchange Commission, it seems have relegated to the limbo of outmoded doctrines" the principle of "fair value."

(4) The latest and most sweeping contention of the Commission with respect to its authority under the terms of the Natural Gas Act is as follows:

"The Natural Gas Act confers upon the Commission *a broad field of discretion for selection of an appropriate rate base.* This authority was upheld by the Supreme Court in the *Natural Gas Pipeline Company* case. Significantly, the Court did not specify so-called fair value, nor 'present value,' in applying its test; but it held that no 'single formula or combination of formulas,' governs rate base determinations (cf. 315 U. S. at p. 586)." (Emphasis ours.)

*Brief Fed. Power Com.* (August 30, 1943), *Canadian River Gas Co. v. Federal Power Comm.* (No. 2551, C.C.A. 10th Circ.) p. 34.

It thus appears that the Commission now proposes to

assume authority at large and at will to impose, from time to time in its rate-regulatory activities, whatever rate base it deems "appropriate." It would seem that if such a charter of authority may be thus developed, the legislative functions of Congress may be dispensed with entirely.

The Commission also assumes that when this Court in the *Natural Gas Pipeline Company* case *supra* stated, "The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas," the principle of "fair value" was intended to be covered thereby, as being a mere formula, instead of the governing principle and end result. This Court as early as *1912* declared the same thing in *Simpson v. Shepard*, 230 U. S. 352, 33 Sup. Ct. 729, 754. To the same effect are numerous decisions of this Court. See *Los Angeles Gas Company v. Railroad Commission*, 289 U. S. 287, 306, 53 Sup. Ct. 637, 644, and cases cited.

Yet the Commission, at this late date, asserts that when the Court in *1942* repeated its former identical declarations dating back to *1912*, the *1942* declaration is revolutionary, and does not mean the same thing as the same declarations made and several times repeated during the preceding 30 years.

(5) The claim frequently made that the Commission in arriving at its so-called "original cost," "actual legitimate cost" and "prudent investment" rate base "considered the evidence as to the claimed cost and the alleged value of the Company's property," is merely a self-serving tug by the Commission at its own boot straps. The legislative and judicial history of the Federal Power Act and the Natural Gas Act conclusively establishes the impropriety of any such contention. It is, of course, true that the Commission, before Congress, in its reports, in its public statements and in its opinions, has persistently and deliberately attempted to outlaw "fair value" as "the law of the land," and substitute therefor so-called "actual legitimate prudent cost." We use the word "impropriety" advisedly, for the Power Commission is a mere administrative agency, not possessed of either legislative powers or judicial functions, entitling it to make and declare "the law of the land." From the Commission Opinion, *Re Chicago District Electric Gen-*

*erating Corporation* (July, 1941), 39 P.U.R. (n.s.) 263, 269-272 to its latest Opinion (No. 95, July 28, 1943), *Re Cities Service Gas Company*, the rejection by the Commission of "fair value" has been uniform and complete. We quote again from its Opinion last rendered in *Re Cities Service Gas Company:*

"*Exclusion of 'Fair Value' Evidence.*

"At the threshold, we are met with the Company's contention that the trial examiner improperly excluded evidence of reproduction cost and *so-called* 'fair value' of the properties. Our views as to why such evidence should be excluded have been stated in earlier opinions (Citing: *Detroit v. Panhandle Eastern Pipe Line Company, et al.*, 45 P.U.R. (n.s.) 203, 208-210; *Re Chicago District Electric Generating Company*, 39 P.U.R. (n.s.) 263, 269-272), and need not be amplified here."

How then can it be said that consideration is given to "fair value," when the entire principle of "fair value" is rejected by the Commission. "Fair value" is treated as simply non-existent, and so obviously is not considered at all.

For example, "fair value" being "the law of the land," which principle the Commission rejects, its conclusions as to the so-called "actual legitimate cost" and "prudent investment" rate base are wholly irrelevant and without authority of law. There is no legal basis for such administrative determination. *It is not here a question of what evidence is or is not proper and admissible to establish "fair value," or what conclusions as to "fair value" may properly be drawn from evidence of original or historical cost (Los Angeles Gas Co. v. Railroad Comm.*, 289 U. S. 287, 309, 53 Sup. Ct. 637, 645). We are confronted with the rejection of the principle of "fair value" in its entirety.

"• • • If an order is valid only as a determination of policy or judgment which the agency alone is authorized to make and *which it has not made*, a judicial judgment cannot be made to do service for an administrative judgment. • • •

• • • • • •

"That the scope of such review is narrowly circumscribed is beside the point. For the courts can not exer-

cise their duty of review unless they are advised of the considerations underlying the action under review.

* * * * *

"* * * *if the action is based upon a determination of law as to which the reviewing authority of the courts does come into play, an order may not stand if the agency has misconceived the law.*

* * * * *

"* * * an administrative order can not be upheld unless the grounds upon which the agency acted in exercising its powers were those upon which its action can be sustained." (Emphasis ours.)

*Securities and Exchange Comm. v. Chenery Corp.*, (1943) ..... U. S. ....., 63 Sup. Ct. 454, 459, 462.

"* * * Only when the statutory standards have been applied can the question be reached as to whether the findings are supported by evidence. * * *"

*United States v. Carolina Freight Carriers Corp.*, 315 U. S. 475, 489, 62 Sup. Ct. 722, 730.

To the same effect this Court, speaking through *Chief Justice Stone*, with respect to the authority of the Federal Power Commission under the Natural Gas Act, recently declared:

"* * * Agencies to whom this legislative power has been delegated are free, *within the ambit of their statutory authority*, to make the pragmatic adjustments which may be called for by particular circumstances. *Once* a fair hearing has been given, proper findings made, and *other statutory requirements satisfied, then* the courts cannot intervene in the absence of a clear showing that the limits of due process have been overstepped. * * *" (Emphasis ours.)

*Federal Power Comm. v. Natural Gas Pipeline Co.* (1942), 315 U. S. 575, 586, 62 Sup. Ct. 736, 743.

**Conclusion.** The above summary of Power Commission position and decision as to *rate base* supplements the impressive legislative history showing that that body deems itself either exempt from the restraints of law or possessed of a virtually unlimited "discretion." In either event the

lawful source of such asserted authority is not disclosed. In fact the entire absence of such authority is affirmatively establised by the unambiguous terms of *Section 6* of the Natural Gas Act and *Section 208* of the Federal Power Act. The statutory construction indulged by the Commission involves and requires both additions to, eliminations from and substitutions for the statutory words and concepts to produce the meaning urged by it. The Commission "construction," so-called, amounts to far-reaching administrative legislation, nothing less and nothing else.

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IN THE

# Supreme Court of the United States

OCTOBER TERM, 1943

No. 34

FEDERAL POWER COMMISSION, CITY OF AKRON, and PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioners,*

v.

HOPE NATURAL GAS COMPANY, *Respondent.*

**ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT**

AND

No. 35

CITY OF CLEVELAND, *Petitioner,*

v.

HOPE NATURAL GAS COMPANY, *Respondent.*

**ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT**

## BRIEF OF STATE OF WEST VIRGINIA AS AMICUS CURIAE

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## BRIEF OF STATE OF WEST VIRGINIA AS AMICUS CURIAE

This Brief is filed in the present proceedings on behalf of the State of West Virginia, pursuant to Paragraph Nine of Rule Twenty-seven of the Rules of the United States Supreme Court.

## OPINION BELOW

The opinion of the Circuit Court of Appeals on the issues here involved is officially reported in 134 F. (2d) 287; and has been included in the Record at R. IV, 169-207.

## JURISDICTION

The judgement of the Circuit Court of Appeals, with which the State of West Virginia is in general agreement, was entered on February 16, 1943, (R. IV, 207).

The petitions for writs of certiorari were granted by this Court on May 17, 1943, (___ U. S. ___, 63 S. Ct. 1105, 87 L. Ed. 995, (1943); R. IV, 210).

The jurisdiction of this Court in these causes has been invoked under Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925, (28 U. S. C., Sections 346 and 347), and under Section 19 (b) of the Natural Gas Act of 1938, (52 Stat. 831; 15 U. S. C., Section 717r [b]).

## STATUTES INVOLVED

The Natural Gas Act of 1938 (52 Stat. 821; 15 U. S. C., Sections 717 *et seq.*), which became effective on June 21, 1938, is here involved. Prior to that date, there was no statutory background whatsoever.

West Virginia Tax Statutes, (Code of West Virginia, Chap. 11, Articles 6 and 13), are also involved.

## CONSTITUTIONAL PROVISIONS INVOLVED

The Fifth and Tenth Amendments to the Constitution of the United States are likewise involved in this litigation.

## QUESTIONS PRESENTED

1. Whether, for rate-making purposes under the Natural Gas Act, the Commission may wholly disregard the ultimate effect upon the economy and well-being of the State of West Virginia, and upon the citizens of West Virginia, of the valuations placed on gas-utility properties.

2. Whether, in the valuation of gas fields and gas horizons, the Commission may deliberately assign over to out-of-state domestic and industrial consumers the entire "advantage of the discovery value" of productive acreage in West Virginia.

3. Whether, for such rate-making purposes, the Commission may completely ignore the legal interest of the lessors of gas-producing leaseholds, in attempting to arrive at a value for West Virginia gas resources.

4. Whether, in drastic reduction of utility values, the Commission may utterly fail to take into account the paramount need for conservation of West Virginia's diminishing gas supply; and may thus fix minimum valuations which discourage exploratory search for new gas deposits, while hastening the abandonment of high-cost, low-yield marginal wells.

5. Whether, by inclusion in the utility rate-base of all by-product operations of an affiliate company, the Commission may accordingly control, in one way or another, investigatory development and research.

6. Whether the Natural Gas Act requires that rates and charges for and in connection with the transportation or sale of natural gas in interstate commerce must be just and reasonable to the state of production, (i. e., in this instance West Virginia),—and to the owners of gas and gas-producing lands in that state,—as well as to the consumers of gas.

7. Whether the rates and charges so ordered by the Commission in these proceedings are just and reasonable to the State of West Virginia, and to its citizens who own gas and gas-producing lands.

8. Whether the Commission's valuation of the properties of Hope Natural Gas Company did disregard the

economy and well-being of the state of production, assign to out-of-state consumers the entire "discovery value," did ignore the legal interests of lessors of gas-producing leaseholds and did discourage exploration and research, and was therefore arbitrary and capricious; and whether the ordered rates and charges were thereby rendered unjust and unreasonable.

9. Whether, under the guise of interstate rate-making, the Commission may, in fact, regulate "the production or gathering of natural gas," despite the explicit statutory provision to the contrary.

10. Whether, by the terms of the Natural Gas Act, the Commission is to value West Virginia's gas reserves as of June 21, 1938, (when the interstate gas traffic was first made subject to federal regulation), or whether the Commission may instead examine into the accounting practices of decades ago, (during which the operating company was a private industry), and thereby retroactively hold the company to have been a public utility even prior to 1938, and retrospectively value its properties.

## STATEMENT OF THE CASE

This proceeding was instituted on July 6, 1938, only fifteen days after the effective date of the Natural Gas Act. The original complaint was filed with the Federal Power Commission by the City of Cleveland, Ohio. It complained of the wholesale rates charged by Hope Natural Gas Company on natural gas sold to East Ohio Gas Company, the distributing company serving Cleveland and other Ohio cities. Subsequently, other parties were permitted to intervene.

By its opinion and order, the Federal Power Commission determined that the gross proceeds derived by Hope Natural Gas Company from the production, handling and sale of natural gas in future years, should be reduced by

the sum of approximately $3,600,000. *per* year. Hope Natural Gas Company thereupon filed its petition for review with the United States Circuit Court of Appeals for the Fourth Circuit, and that Court reversed the order of the Commission. The proceeding has now been brought to this Court upon petitions for writs of certiorari filed by the Federal Power Commission, by the cities of Cleveland and Akron, Ohio, and by the Pennsylvania Public Utility Commission.

The tax revenues of the State of West Virginia, and of many of its counties and municipalities, are derived in part from levies imposed upon the true and actual value of properties of natural gas companies, including gas lands, gas leaseholds and gas wells. All of the gas-producing and transporting properties operated by Hope are located in West Virginia. The West Virginia Board of Public Works has fixed the "true and actual value" of Hope's properties, *for West Virginia property-tax purposes*, at $53,338,000. (Ex. 108, Supp. pp. 391-393; and R. 5431-5433). In contrast, the Federal Power Commission has sought herein to establish an interstate rate-base of $33,712,000. *for interstate rate-making purposes.* Should the latter method of valuation be finally sanctioned, there would immediately be a great and irreparable loss of revenue to the State of West Virginia, with serious injury consequent to the school system and other governmental functions. West Virginia also derives a part of its revenues from a tax levied upon the privilege of engaging in the business of producing natural gas, and measured by the gross proceeds derived from the sale thereof by the producer; and the reduction in gross proceeds ordered by the Commission would likewise cause a severe loss of revenue.

The State of West Virginia (as well as the Public Service Commission of West Virginia), intervened in the

consolidated proceedings before the Federal Power Commission. Briefs were filed, and oral arguments made to the Commission. Neither the Commission's order nor its opinion took any cognizance whatsoever of the position of the State of West Virginia; nor did the Commission anywhere refer to the injurious effect upon the fundamental economy of the State of such far-reaching gas-rate reductions.

From the outset, West Virginia has taken the stand that, in fitting the Natural Gas Act into the federal scheme, the Federal Power Commission must arrive at rates and charges which are just to the state in which natural gas is produced, as well as to distant consumers of the gas. Either the Commission must find formulas for the law's application which result in justice being done within the framework of the Act, or states of production may perhaps find ways outside of the Act to escape its more serious injuries. Neither the federal nor the state authorities can desire that eventuality to occur. It will be the purpose of this Brief to demonstrate that the administrative result achieved in the Hope case brings consequences which are unjust to West Virginia and its citizens; and these unfairly depress the value of gas, gas lands and gas leaseholds, unduly restrict development of their natural resources, and arbitrarily transfer their properties to the residents of other states without just compensation therefor.

When the proceeding was taken to the Circuit Court of Appeals by the appropriate review procedure, West Virginia deemed it inadvisable then to continue actively as an intervening party in the various cases, lest its interest in the broader phases of the issue be misinterpreted. The Federal Power Commission had throughout insisted on viewing these proceedings as an ordinary contest primarily between a single producer of natural gas and its

interstate customers; and had seemed unwilling to regard the contentions of the State as having any sort of independent significance. Under such circumstances the State of West Virginia did not participate further in the hearings before the Circuit Court of Appeals. Decision was made, however, to appear as Amicus Curiae in any future argument of the cause before the Supreme Court of the United States, in order that full presentation of the important questions involved in interstate valuation of natural resources might thus be had.

The present Brief as Amicus Curiae is now accordingly filed before this Court.

## SUMMARY OF ARGUMENT

West Virginia contends that in determining both the rate-base and the rate, the Federal Power Commission has steadfastly refused to give any consideration whatsoever to the economic welfare of the State of West Virginia and of its citizens; and the Commission's decision would now operate to transfer a considerable part of the mineral wealth of West Virginia over to citizens of Ohio and Pennsylvania. The Commission seeks thus to deprive West Virginia and its citizens of their property without due process of law or just compensation, and to invade unconstitutionally the reserved powers of the State.

### I

A. The State of West Virginia, as Amicus Curiae, urges the importance of a fair valuation of its natural gas resources in the economy and well-being of the State. First and foremost, the State has a direct sovereign interest in governmental revenues from its natural gas industry, for without such tax income the essential services of the State must inevitably suffer. The Court has re-

cently recognized the significance of such a public interest by its decision in *Burford* v. *Sun Oil Co.*, --- U. S. ---, 63 S. Ct. 1098, 1100, 87 L. Ed. 999, 1001-1002 (1943). And similarly, in this governmental capacity, the paramount need for conservation must be brought to the attention of the Court.

B. Again, the State may now intervene, in behalf of its citizens, to insure an orderly marketing of its natural resources so as to promote their prosperity and welfare. Since the operating company seldom, if ever, owns the gas reserves in fee simple, it is also proper for the State to propose that the interests of the *lessor*, as well as those of the *lessee*, ought to be fairly appraised in the determination of the interstate rate-base.

C. Finally, to the extent that the State is itself a proprietor of gas fields, it should here protest against any administrative action which might, in the long run, impair the worth of that ownership. Otherwise, its mineral wealth could later be seriously depreciated in value through the policies of the Federal Power Commission; and any contention that the methods of valuation employed were confiscatory would then come too late.

II

West Virginia also contends that the Federal Power Commission has exceeded its jurisdiction under the Natural Gas Act, and has actually applied the provisions of the Act to production or gathering properties, despite the explicit statutory provision to the contrary contained in Section 1(b) of the Act.

III

Under the formulas devised and applied by the Federal Power Commission in this case, the value of the remaining mineral resources of West Virginia will be controlled

by the accidental cost of the mere facilities required to produce them, without regard to their worth either as a fuel or as raw material for commercial products. The manner in which the Commission has construed and applied the Act fails thus to accord with that proper adjustment of local and national interests required by the federal Constitution, and by the federal system.

## BACKGROUND OF WEST VIRGINIA'S INTERVENTION

It has become necessary for the State of West Virginia to explain here the legal and factual background of its intervention in these proceedings. While the important facts now adduced are amply set forth in the Record, there is no mention of the State's situation either in the Federal Power Commission's opinion or in any of the various briefs of Commission counsel.

### A. The Position of the State of West Virginia.

"In no other field of public service regulation is the controlling body confronted with factors so baffling as in the natural gas industry", (*Pennsylvania* v. *West Virginia*, 262 U. S. 553, 621 (1923), *per* Brandeis, J., dissenting). The present litigation splendidly illustrates that dictum, at least to the extent that future exploitation of West Virginia's gas reserves depends upon their reasonable valuation in interstate markets. In fact, the ultimate issue here goes back twenty years or more, for the whole problem before this Court is simply the orderly development of these mineral resources in accordance with the needs of West Virginia. *Pennsylvania* v. *West Virginia* decided only that a producing state could not, by legislation, require preference to be accorded local consumers, and thereby withdraw a larger volume of gas from an established interstate current. Still the holding did not

in any way involve interstate price-fixing; nor did it go so far as to foreshadow a later attempt to jeopardize the State's economy by harsh undervaluation of operated leaseholds. The question now arises as to whether,—granted West Virginia's gas resources have thus been irrevocably dedicated to intertate commerce,—it is a fair implication from the *Pennsylvania* v. *West Virginia* theory that the producing state should have no voice whatsoever in their management.

The State of West Virginia does not attempt, in the present Brief as Amicus Curiae, merely to advocate the interests of a single producing company. It assumes, rather, that the litigation now before this Court will be determinative of the validity of the current administrative practices of the Federal Power Commission. Thereafter, the same measuring-rod, the same yardstick of valuation, can be applied to other gas operators in West Virginia; and the vital issues will have already been settled. In other words, the State of West Virginia appears here because the precedent which the *Hope* case will establish may become of grave import for the future. Exactly the same issues, the same argument, the same dangers will be met in numerous other proceedings involving West Virginia. In all of them there will be the identical questions,—namely, the position of the producing state in our federal system, and the valuation of mineral resources within the rule of *Pennsylvania* v. *West Virginia*.

This Court will note that the ultimate issue has to some extent been viewed in briefs of counsel for the respective petitioners,—and, indeed, by the opinion of the Commission itself,—as though it were a contest merely between the Standard Oil Company (New Jersey) and the householders of northeastern Ohio and western Pennsylvania. There is the suggestion that the case involves "dividends to Standard Oil"; and the past financial history of the

Standard Oil subsidiary, prior to the Natural Gas Act of 1938, is accordingly scrutinized. To such contentions the State of West Virginia has no reply to make. Whether or not the Standard Oil Company should be regarded as subject to the Public Utility Holding Company Act of 1935,—and analogous questions, are not before the Court in the present litigation. The State of West Virginia is concerned only with the fair valuation of its mineral resources, within the vast scope of the interstate commerce clause. Hence, the circumstance that one of the various operating companies, engaged in "the production or gathering of natural gas," is owned or controlled by Standard Oil is not only irrelevant here, but wholly immaterial. The State of West Virginia regrets that it has been necessary to advert to such allusions in briefs of counsel.

**B. Nature of the West Virginia Gas Industry.**

Something like half of the nation's total annual consumption of natural gas is presently transported in interstate commerce; and the problem of rate-making becomes a most important one, especially because such an interstate gas traffic (for the most part) denoted purely private business and not public-utility service prior to the 1938 federal law. The Brief for Petitioners, Federal Power Commission *et al.*, (page 78, footnote 37), apparently does not realize that the Hope Company was in no sense a common-law or statutory utility before 1938, (*Missouri* v. *Kansas Gas Co.*, 265 U. S. 298 (1924); *Public Utilities Comm.* v. *Landon*, 249 U. S. 236 [1919]). It also complicates matters that almost four-fifths of the whole national production goes for industrial purposes, with ordinary domestic uses playing a surprisingly minor role in its utilization (Brown, Ex. 19, 6). In other words, unlike the product of most public-service companies, there is actually an existing price for gas which is relatively independent of the customary sales to utility-patrons; and

that gas price had been established (prior to 1938) by trading at arm's length in competition with coal, coke, oil and other fuels.

Moreover, the Court will judicially note that natural gas companies furnish an irreplaceable commodity; a state's natural resources are seriously depleted in this kind of commerce. It is customary to compare the interstate development of gas deposits with the movement of timber, iron ore and other raw materials from mining states to manufacturing centers, (as in *Pennsylvania* v. *West Virginia*); but the essential present factor of price-control, under the Natural Gas Act, is then overlooked. Under normal conditions, there is no restraint on the interstate bargaining as to timber or solid minerals; a producing state's economy is not seriously threatened by outside rate-making. Indeed, the Guffey Act carefully took into account all these factors, so that ideals of conservation and investment-stability were linked up to the concept of consumer protection in bituminous coal price-fixing, (15 U. S. C., Sections 828 to 851). In the absence of such safeguards, interstate rate-making could, in the long run, entail the export of valuable natural resources at a sale-price less than the actual worth of the commodity at the point of origin. And *Pennsylvania* v. *West Virginia* might then lead, under statutory and administrative regulation, to ruthless exhaustion of local gas resources simply for the benefit of nearby industrial states,—a result unthinkable in our federal system.

In West Virginia, the gas-producing sands are continuously variable in thickness; and they are inclined to be lenticular in character, (—which is to say, shaped like a double-convex lens),—with porosity differences causing irregular areas of production. (Tollefson, Ex. 15.) Local geological prophecy is accordingly far less certain than in regions of the southwest, (Sisler and Tucker,

*Natural Gas in West Virginia*: contained in GEOLOGY OF NATURAL GAS, published by the American Association of Petroleum Geologists [1935]). There is widespread distribution over gently-sloping geological structures, without the concentrated pools on structural highs one finds in Texas or California fields. Erratic sand conditions naturally increases drilling hazards, though the existence of several producing-horizons somewhat balances the chances. But West Virginia leaseholds generally produce lower open-flow volume; in the present litigation, for example, the exhibits show that the 3300 Hope Company wells average only a relatively-small daily yield. Thus the delivery over longer periods of time sends up the overhead charges. The important geological factor in all this is that these gas pools are extremely limited in extent, and separated considerably by unproductive areas; and they occur (along anticlinal structures) on synclines, on the flanks of anticlines and on the crests. It is that very unpredictable quality which, more than anything else, creates so high a discovery value for producing leaseholds. Gas properties then appreciate more and more in value; and the appreciating process continues on indefinitely as the Appalachian fields decline in production. (Stephenson, *Valuation of Natural Gas Properties*, 1015-1016; contained in GEOLOGY OF NATURAL GAS, published by the American Association of Petroleum Geologists [1935]).

This Court has had before it, within the last decade or so, many important cases involving oil and gas production of the southwest, in all of which the issue of conservation of mineral resources was directly or indirectly involved. In no one of the series of these cases,—extending all the way from *Champlin Refining Co.* v. *Corp. Comm.*, (286 U. S. 210 [1932]), and *Sterling* v. *Constantin*, (287 U. S. 378 [1932]), down to *Federal Power Comm.* v. *Natural Gas Pipeline Co.*, (315 U. S. 575 [1943]), and

*Burford* v. *Sun Oil Co.*, (--- U. S. ---, 63 S. Ct. 1098, 87 L. Ed. 998 [1943]), was the question of acute shortage of mineral resources squarely presented. In contrast, the issue in the past has usually been over-production or waste: for example, *Thompson* v. *Consolidated Gas Utilities Corp.*, (300 U. S. 55 [1937]), revealed that during 1934 and 1935 a billion cubic feet of natural gas was being blown off into the air daily, in the West Texas gas field. (Over a year's time, more gas by far was thereby lost than now remains within the recoverable reserves of the Hope Company's operated acreage). But from these very cases involving such enormous waste, the impression is readily gained that the nation's gas reserves are inexhaustible or nearly so. Now, for the first time, gas litigation is being considered by this Court in which the problem is one of diminishing supply. The fate of the Indiana gas belt, (NATIONAL RESOURCES BOARD, REPORT ON NATIONAL PLANNING, Part IV., *Report of the Planning Committee for Mineral Policy*, 391-439, [1934]), may well prove to be the future in store for West Virginia. In any event, the State has already fallen from first place in national production, two decades ago, to fifth place during recent years. (In 1938, the West Virginia standing was sixth.)

Accordingly, both by reason of geological uncertainties and because of diminishing yield, West Virginia's gas deposits are becoming increasingly valuable. Among the factors to be considered here are the declining volume of output from old wells,—the lower delivering-capacity of new wells,—the increased cost of carrying reserve acreage for future operations,—and the overhead costs of conservation measures. It is impossible to believe that present undervaluation of operated leaseholds can increase the supply of gas available.

## C. Method of Gas Leasing in West Virginia.

It might be well to survey briefly methods of gas leasing in West Virginia, in order that various legal incidents of the gas leasehold may readily appear. (Tollefson, Ex. 23; Ex. 26.) Normally the Appalachian oil and gas operator will first select an area for prospecting work, assuming favorable structure and sand conditions; naturally the porosity and permeability of the producing formation cannot be accurately predicted by the geologist until drilling has made considerable data available. And from this angle, new gas supplies must always prove a risky speculation. Granted, however, a promising region has been chosen for prospecting, the process of securing mineral titles then gets under way. Taking into account the cost and uncertainty of buying the mineral rights in fee, the sounder policy of leasing them is ordinarily adopted here, the practice being to get together as large a block of leased acreages as practicable, before drilling a test well in unproven territory. To ensure retaining the benefit of favorable discovery, the operator must therefore acquire and hold thousands of acres during the exploratory period. Otherwise, successful drilling might simply prove territory controlled by others, so that neighboring leases in each direction would have to be bought up in competition with outsiders, and at prices reflecting the operator's own hazardous accomplishment. Yet if a series of dry holes indicates nonproductive land, those very leases will probably be surrendered, and their entire charges be written off as total loss along with the serious drilling expense. By and large, in the gas industry one thus meets with a constant cycle of surrendering old leases and taking up new ones as the effort to locate new reserves continuously persists.

All these areas, both producing and unoperated, are held under oil and gas leases which have usually been se-

cured for a nominal consideration. Under their provisions, the operator pays an annual delay rental—as a rule, a dollar an acre—as compensation for postpoing drilling; the so-called fixed term or exploratory period then runs for five or ten years, as the particular lease may provide. If within this term a producing well is successfully brought in, the extension clause ("as long thereafter as oil or gas is produced") next comes into play, and the lease continues indefinitely thereafter for the life of the field. In that event, the operator will pay the lessor a stipulated gas-well rental—ranging between two and three hundred dollars a year for each well from which gas is marketed—or, in the newer fields, the lessor will receive a gas royalty equivalent to one-eighth of the gas marketed. As the production gradually diminishes over the years, the operator nurses the old wells along until the rock pressure falls to the average abandonment minimum, and ultimately the operation is given up.

These details are essential to an understanding of the legal significance of the ordinary gas leasehold, which is simply the legal right of the operator to enter on the lessor's premises, to explore for gas, to "sever" the gas from the freehold by reducing it to possession, and to remove it from the premises. In other words, the gas lessee has a common-law *profit a prendre*, (of an exclusive nature), conveyed originally for a term of years and then on discovery extended for the life of the field. (Simonton, *The Nature of the Interest of the Grantee under an Oil and Gas Lease*, [1917] 25 W. Va. L. Q. 295.) In West Virginia, for example, the operator's interest is treated as a chattel real, which is to say, a *profit* for years rather than an incorporeal hereditament, subject as such to the lien of an execution and taxable presumably as Class IV personalty. (*State* v. *South Penn Oil Co.*, 42 W. Va. 80, 24 S. E. 688 [1896]; *Drainer* v. *Travis*, 116 W. Va. 390, 180 S. E. 435 [1935]). Analogously, the lessor's rent-receiv-

ing reversion in subsurface minerals has separate legal recognition, being valued for tax purposes at several times the annual gas rental or royalty *per* well, depending on the character of the producing field. In other words, both the grantor and grantee of the *profit* own important property interests; and those possess considerable present taxable value, quite apart from the original consideration for the lease and the development costs ensuing later. Between the parties, together they own the gas. All this would seem to be most elementary knowledge in oil and gas law, were it not for the alarming proposal now seriously offered, that the interstate consumers should "reap the advantage of the discovery value" of Appalachian gas leaseholds. Surely *Pennsylvania* v. *West Virginia* ought not to be carried so far.

A further word might be added, too, as regards the claim of the lessor, whose reversionary interest in the gas might be lost altogether if the small well were ultimately surrendered and plugged. Surely, as owner in fee of the gas, he should be represented in some way during the rate proceedings: it is his gas which is being severed and then transported in interstate commerce. Where his compensation is in the nature of a gas well rental for the producing *and paying* life of the field, that rent-receiving reversion ought to justify recognition in leasehold valuation. *A fortiori*, if the lessor under new leases has stipulated for an "eighth" gas royalty, the export price becomes a matter of even more vital concern to him. It is difficult to infer that the instrument of lease contemplated an eventual valuing of both *profit a prendre* and reversion on the basis of the book cost, comprising the original nominal consideration and the later development expense. In that event, the lessor would no doubt be surprised to find that he had absolutely no legal claim to any part of the "discovery value," under the policy of the Federal Power Commission.

## D. "The Rate Payers Reap the Advantage of the Discovery Value."

### 1. *The Policy of the Federal Power Commission.*

In the last analysis, the fundamental issue in the present litigation,—and the one in which the State of West Virginia has deep concern;—is the proper valuation of the gas *profit a prendre,* both as regards producing areas and the unoperated leaseholds prudently held in reserve for reasonably-anticipated market demand. In the course of the Brief of Commission Counsel at the hearings before the Federal Power Commission, (p. 211), the ordinary practice in the gas industry was summed up in these terms:

> "When undeveloped acreage is proved nonproductive, its cost, the cost of drilling and delay rentals, are worthless. If proved productive, however, it suddenly acquires great intrinsic value as a gas-producing acreage. The inclusion of this enhanced value on productive acreage in the rate base, with the depletion expense computed upon such value and allowed in operating expenses, provides for all losses in connection with exploration and development and provides a fund to obtain additional developed gas acreage to replenish the gas supply."

Nevertheless, for the valuation of West Virginia gas reserves, Commission Counsel has advocated, (pp. 211-212), and the Federal Power Commission has adopted quite a different plan. In the discussion of depletion charges, the following rule was proposed by Commission Counsel, (and ultimately approved by the Commission):

> "When gas producing acreage is priced at original cost, there is no enhancement of the depletion expense allowance to cover the costs of explora-

> tion and development. The rate payers, therefore, reap the advantage of the discovery value. • • • (Counsel) has recommended that the original cost of producing leases be included in the rate base, in contradistinction from the 'market value' of producing leases."

In view of the confusing terminology of Commission Counsel, a word of explanation might be added here. The term "rate payer" has definite significance both in dictionary-meaning and in legislative use: it is the specific term commonly-employed in England to denote taxpayer.[1] A rate payer is thus one who pays the local (tax) rates. So far as the present case goes, the consumers of northeastern Ohio and western Pennsylvania are in no sense West Virginia rate payers (or taxpayers). The great consumer-industries in these adjoining states contribute absolutely nothing, by way of direct taxation, to the support of West Virginia schools and other essential governmental services. Accordingly, the correct legal statement of the decision of the Federal Power Commission is simply that the (West Virginia) rate payers *lose* "the advantage of the discovery value" (of West Virginia gas reserves). To put it briefly, the out-of-state users gain, while local taxpayers are deprived of the benefit of the fair value of these wasting assets.

In other words, if the operated territory proves productive, the operator is then allowed in his rate-base merely the nominal cost of original acquisition of those acres under which the gas was later found by testing, along with the actual expense of drilling the wells. There is no *discovery-value* for either lessor or lessee: apparently the gas at once belongs to the interstate customer, sub-

[1]Yet Commission Counsel continuously becloud the issue by its improper use. For example, the Brief of Petitioners, (page 18), argues that "well-drilling expenditures had been contemporaneously recovered through revenues from the rate payers."

ject only to the payment of transportation charges and a reasonable return on the diminutive rate-base of nominal costs and drilling expense. No doubt it might be seriously contended that the operator is amply safeguarded against financial loss by including within the category of operating expenses (1) delay rentals on undeveloped leaseholds, (2) dry-hole losses, (3) disbursements for nonproductive acreage that is abandoned and (4) the other exploration costs. Thus, one can say, the utility has obtained a fair return on the actual-cost basis. As regards the gas properties themselves, the same argument would assume that the consumers have in the past bought a substantial equity in these particular holdings, simply by paying prices that included delay rentals and drilling costs. The fundamental fallacy in it all is the complete failure to consider the reversionary interest of the lessor or the economy of the producing state, not to mention the arbitrary and retroactive policy of viewing the *profit a prendre* on the basis of an investment of decades before, rather than according to its fair value in 1938. And until this Court has ruled otherwise, the State of West Virginia will contend that its natural gas resources as of the year 1938, (theretofore owned by private interstate industry), were being regulated by Congress on today's basis.

2. *Administrative Valuation of Natural Gas Leaseholds.*

So the Commission's order has raised the vital question in this litigation as to how *low* West Virginia leasehold values can be fixed within the limits of the Constitution, in order that interstate domestic and industrial consumers may pay less for the rapidly-diminishing supply of natural fuel. Naturally, it would merely be arguing in a circle to assert that the operator's *profit a prendre* is worth no more than the capitalization of net income from

whatever gas rates may ultimately be established by the Federal Power Commission. The whole difficulty is, what are the proper rates: and the Natural Gas Act specifically empowers the Commission to determine "fair value" in making up the rate-base. One must accordingly start with the valuing of gas properties, before even considering the important collateral issues of operating expenses and rate of return. And any alleged monopolistic character of natural gas, according to Justice Cardozo, may be wholly ignored, (*West Ohio Gas Co.* v. *Public Utilities Comm.*, 294 U. S. 63, 72 [1935]):

> "The suggestion is made that there is no evidence of competition. We take judicial notice of the fact that gas is in competition with other forms of fuel, such as oil or electricity."

If one may properly infer from the very silence of the Natural Gas Act that the method of valuing gas *profits a prendre* is still open, the prior administrative and judicial practice in the task of intrastate rate-making should then be studied. It would be convenient to separate the case-law into two periods, marking the division by the United States Supreme Court's ruling in *United Fuel Gas Co.* v. *Railroad Comm. of Ky.*, (278 U. S. 300 [1929]), a dozen years ago. Originally, in the earlier stage, there was considerable uncertainty among commissions and courts as to how to tackle the issue. Gradually, "present fair value" became the approved test in West Virginia,[2] Pennsylvania,[3] Ohio[4] and New York.[5]

The legal history of leasehold valuation within the Appalachian territory was mirrored in case-law from the

[2] *City of Charleston* v. *Public Service Comm.*, 95 W. Va. 91, 120 S. E. 398 (1923), syl. 2.

[3] *City of Erie* v. *Pennsylvania Gas Co.*, 278 Pa. 512, 528, 123 Atl. 471, P. U. R. 1924D 89 (1924).

[4] *Logan Gas Company* v. *Public Utilities Comm.*, 124 Ohio St. 243, 177 N. E. 587 (1931).

[5] *Pennsylvania Gas Co.* v. *Public Service Comm.*, 207 N. Y. Supp. 599 (1925).

mid-continent field. All the old rulings,—for and against capitalization or for and against present value,—were reviewed in decisions by Oklahoma,[6] Kansas[7] and Montana[8] commissions and courts. The upshot of it all was the approval of an administrative process of valuing gas rights on some basis of present worth, so that the national picture was uniform: up to a dozen years ago, there was very little doubt as to the proper solution.[9]

*United Fuel Gas Co. v. Railroad Comm. of Ky.*, (278 U. S. 300 [1929]), involved valuation of gas rights covering a total of more than eight hundred thousand acres, a relatively small part of which was held in fee. Geological and engineering experts had computed an estimate of the total volume of gas underlying the proven and probable territory. These calculations had been supplemented by testimony that in Pittsburgh there was an unregulated market for industrial gas, which could always be maintained in competition with coal and coal products. Other experts

[6]*Re Pawhuska Oil & Gas Co.*, P. U. R. 1917D 947 (1917); *American Indian Oil & Gas Co. v. Poteau*, 108 Okla. 215, 235 Pac. 906 (1925).

[7]*Landon v. Lawrence*, P. U. R. 1916B 331 (1916); *Landon v. Public Utilities Comm.*, 242 Fed. 658, P. U. R. 1918A 31 (D. C. Kan. 1917).

[8]*Re Baker Natural Gas Utility*, P. U. R. (1921E 609, 622 1921); *Public Service Comm. v. Montana Petroleum Co.*, P. U. R. 1923B 364.

[9]To be sure, the West Virginia Supreme Court of Appeals held, (*Natural Gas Co. v. Public Service Comm.*, 95 W. Va. 557, 121 S. E. 716 [1924], syl. 6), that the total of the delay rentals paid had to be taken into account for any survey of appreciation in lease values; yet that judicial result can be understood, even though it seems doubtful. Possibly there was the intuitive thought of achieving lower rates in the regulated West Virginia market for the West Virginia consumers of an exhaustible West Virginia natural resource, as against higher prices in the unregulated sales outside the state. This would seem to be an extremely broad extension of the custom of the lessor's free gas covenant, so as to amount to a "cheap gas covenant" in favor of local consumers; yet in substance that is what the delay-rental holding might accomplish. By keeping down the rate-base through a discount of leasehold appreciation, it is not far-fetched to suggest the West Virginia theory effectively protected domestic consumers. Perhaps it merely illustrated a latent effort to circumvent *Pennsylvania v. West Virginia*: granted West Virginia consumers could not have priority as a matter of state legislation, they might at least have more favorable prices for the local product as a matter of judicial decision.

familiar with the production and marketing side had given opinions also based on an assumed gas supply available for unregulated sale at predictable prices. On the other hand, only about a sixth of the entire acreage was proven territory. After characterizing the proof offered as "wanting in probative force," the Court held:

> "On the record as made, appellants have failed to present any convincing evidence of value of their gas field which would enable us to assign to it any greater value than that which they appear to have assigned to it on their books. This book value, therefore, may be accepted, not as evidence of the real value of the gas field, but as an assumed value named by the appellants, which on the evidence presented cannot reasonably be fixed at any higher figure." (278 U. S. 300, 318.)

Accordingly, since the burden of proving the value in a confiscation case rested on the utility, and had to be "supported by clear and convincing evidence," the action of the lower federal court in denying an injunction against the commission rate-making was unanimously affirmed. It must be borne in mind, however, that the company had roughly but seventy thousand operated acres,—with more than ten times that much unoperated,—and it was allowed by the Court to include the latter in its rate-base and their delay rentals in operating expenses. This decision was thus conclusively significant for several reasons. In the first place, the issue as to capitalization was definitely settled, in the affirmative; the value of leasehold had to be taken into account in natural gas regulation. Next, precise evidence was essential in the establishment of the valuation claimed, for the testimony as to a computed value for gas reserves in the ground based on geological estimates and predicted future prices could not be accepted. Nevertheless, the inference was left that had market value been proven, by adequate sales and purchases

of leases, its adoption would have been approved. Finally, reasonable accumulations of undeveloped acreage might be sustained, where the operator's business required such prudence and foresight.

With the *United Fuel Gas* case, a new chapter began in leasehold valuation. Litigation was henceforth to turn on the adequacy of the proof offered by the operator in support of its position as to present fair value. To be sure, in *Los Angeles Gas & Electric Corp.* v. *Railroad Comm. of Cal.*, (289 U. S. 287, 305 [1933]), the Chief Justice observed as to public utility properties that "the criteria at hand for ascertaining market value, or what is called exchange value, are not commonly available." Still in subsequent rate cases, efforts were diligently made to produce the "clear and convincing evidence" required. *Dayton Power & Light Co.* v. *Public Utilities Comm.*, (292 U. S. 290 [1934]), brought the problem to the Supreme Court once more. In addition to the customary forecasts of production capacity in an unregulated market, there were now instances of actual sales of other leaseholds in sporadic transactions, at disparate prices. The Ohio Commission had actually valued producing acreage at twenty-five dollars an acre, following the precedent of the *Logan* case and disregarding book cost. It was held without dissent that the burden of proof as to confiscation on the basis of the old rates had not been sustained. Recent state cases have tended, moreover, to some sort of present value for gas properties.

The direct issue of leasehold valuation has not again reached the Supreme Court, although the recent decision in the *Natural Gas Pipeline* case is indicative of the Court's interest in the subject. Chief Justice Stone, who wrote the opinion in *United Fuel Gas Co.* v. *Railroad Comm.*, again spoke for the majority; and specifically observed that the Federal Power Commission had here

taken the operator's statement as to the present value of the gas reserves. On the whole, the language of the Court perhaps seems to approve the Commission's action:

> "And the allowed 'present value' of leases as of June 1, 1939, $13,334,775, is approximately $4,000,000 more than book cost, even without taking into account a substantial reduction for depletion services of $1,152,854, which the companies had accrued on their own books by the end of 1938." (62 S. Ct. 736, 744, 86 L. Ed. 699 [1942]).

Nothing was said about undeveloped acreage, nor was there any court reference to the inclusion of delay rentals in some rate-making category.

Sifting down all the case-law for both the periods before and after 1929, certain propositions seem clearly established. In the first place, no court of last resort has refused to capitalized gas leaseholds, although the precise method of capitalization still remains open. Secondly, it has not been held as a matter of federal constitutional law that leases *must* be valued merely at book cost. Thirdly, unoperated territory ought not to be capitalized until there is "present or immediate need" for its use. Fourthly, unusual proof by "clear and convincing evidence" is requisite to support the claim of market valuation. And, finally, delay rentals on reasonable quantities of unoperated leaseholds can be included within operating expenses, (unless the amortization charge be adequate to carry them). It is to be noted, however, that the reversionary interest of the grantor of the gas *profit à prendre*, as well as the economy of the producing state, has scarcely received adequate judicial recognition as yet.

3. *Leasehold Valuation and the Producing State.*

The gravity of the issue before the Court amply justifies this extended discussion of gas-leasehold valuation.

As a matter of West Virginia law, gas reserves are presently valued by the Public Service Commission at their real worth, with certain deductions; if the proposed variant of original cost (adopted by the Federal Power Commission) were to be finally upheld, there would then be two different methods of valuation flourishing simultaneously, side by side. For all intrastate utility service, market value would be the legal standard: but for the interstate gas traffic, something less than out-of-pocket expenditure would control as to leasehold and reversionary interests of producers and farmers alike, in the export of West Virginia's mineral wealth. That result would call up the shadowy ghost of *Swift* v. *Tyson*, (16 Pet. 1 [1842]; see *Note* [1940], *Oil and Gas Law in the Federal Court*, 46 W. Va. L. Quart. 154), to serve as the governing factor in interstate gas-property valuation.

Nevertheless, wholly apart from all these various questions, the paramount consideration now before the Court is the situs of the ownership of the "discovery value," as between the producing state and the distant consumers. An ordinary example will suffice here. Assume there is a block of new operated leaseholds, (with satisfactory rock-pressure), the development of which has cost the operator the following sums:

| | |
|---|---|
| Nominal consideration | $ 20.00 |
| Delay rentals | 1,000.00 |
| Drilling expense:[10] | |
| 30 producing wells at $7,000 per well | 210,000.00 |
| Total cost | $211,020.00 |

In all probability, the minimum present worth of these new leaseholds, with their producing wells, would be (in

[10] Arnold and Kemmitzer, *Petroleum in the United States*, 169 (1931).

normal times) in excess of a half-million dollars. Thus, the "discovery value" of such leases might amount to hundreds of thousands of dollars. The Federal Power Commission has decided that "discovery value" belongs to domestic and industrial users in adjoining states: it is no longer, at least for interstate rate-making purposes, the property of West Virginia and West Virginia operators. To put the issue more succinctly,—West Virginia producers have in the past exported their gas to Ohio and Pennsylvania; and the Commission has now sought analogously to export across the state-line the "discovery value" of West Virginia gas-leaseholds. It is ridiculously absurd to suggest that so important a value ought not to be included within the reckoning of West Virginia's mineral wealth.

Accordingly, the State of West Virginia has been obliged to intervene in these proceedings, simply in order to protect and safeguard its natural resources against arbitrary administrative action. This Court has the serious responsibility of adjusting interstate relations, so as to promote commerce in natural gas among the states in accordance with the mandate of Congress. Still the precedent of *Pennsylvania* v. *West Virginia* does not compel the surrender of "discovery value" to out-of-state consumers,—nor does the Constitution contemplate so severe an injury to the producing state. Yet the Federal Power Commission has refused even to consider the protests of West Virginia against such spoliation.

## ARGUMENT

### I

### The State of West Virginia, as Amicus Curiae, May Urge the Importance of a Fair Valuation of Its Natural Gas Reserves in the Economy and Well-being of the State.

A. The State Has a Direct Sovereign Interest in Governmental Revenues from its Natural Gas Industry.

This Court has in the past recognized the interest of the State in taxes from its oil and gas industry. In *Burford v. Sun Oil Company*, (--- U. S. ---, 63 S. Ct. 1098, 1100, 87 L. Ed. 999, 1001-1002, 1007 [1943], *per* Black, J.), the Court said:

> "Texas interests in this matter are more than that very large one of conserving gas and oil, two of our most important natural resources. It must also weigh the impact of the industry on the whole economy of the state and must consider its revenue, much of which is drawn from taxes on the industry and from mineral lands preserved for the benefit of its education and eleemosynary institutions.[10]"

Footnote: [10] "The problem of gaining an adequate revenue from the petroleum industry was particularly serious in Texas during the period 1930-35. The question was discussed by Governor Sterling in messages to the legislature in 1931, 1932, and 1933, and by Governor Allred in 1935. See The Texas Senate Journal, Jan. 13-May 23, 1931, p. 526; ibid, July-August, 1931, p. 594; ibid, September-October, 1931, p. 164; ibid, August-September, 1932, p. 60; ibid, Reg. Sess. 1933, pp. 587, 589, 590."

Footnote. [28] "The special session of July and August, 1931, was in session when MacMillan v.

Railroad Commission was decided, and, as has been noted above, the MacMillan Case provided the special session with the bulk of its business. People's Petroleum Producers v. Smith (DC) 1 F Supp 361 was the cause of the special session of November, 1932. In his introductory message to the special session, Governor Sterling said: 'Most assuredly, I would not, at this time, have called you into extraordinary session except I believe a grave crisis again confronts the State and our people on account of the Federal Court having held that the Railroad Commission has gone beyond the authority given in this statute enacted at that time in promulgating their orders as to proration and conservation of oil and gas * * * It is apparent that (as a result of the decision) the state's greatest natural resource—oil and gas—will be wasted and destroyed, resulting in a tremendous financial injury to the state, especially to the taxpayers and the public schools. It is apparent that under such conditions, the state's income, as a result of the gross production tax on oil, will be reduced from approximately $16,000 a day to a few thousand dollars per day; thus depriving the State of a tremendous amount of revenue.' Texas Senate Journal, Nov. 1932, pp. 3, 4."

There is little doubt in the present litigation that the Hope Natural Gas Company will effect a very considerable saving in West Virginia property taxes, as a result of the ordered rate reduction.[11] Certainly, the reduced tax-valuation which unfortunately becomes inevitable, (when the Federal Power Commission fixed the rate-base at roughly $33,000,000., as compared with the pres-

[11]The Hope Company has represented to the Commission that it expects to save $338,000 annually, in West Virginia property taxes, (Brief for Petitioners, Federal Power Commission *et al.*, p. 32).

ent Board of Public Works tax-base of almost $53,000,000,), will affect property taxes in most of the counties of the State.[12]

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[12] According to the printed Report of the State Tax Commissioner, 1937-1938 and 1939-1940, (pp. 1059 and 1054, respectively), the assessment of the Hope Company by counties is as follows:

| | 1936 | 1937 | 1938 | 1939 |
|---|---|---|---|---|
| Barbour | $ 261,600 | $ 251,800 | $ 248,000 | $ 251,300 |
| Boone | 1,654,800 | 1,647,200 | 1,635,800 | 1,592,900 |
| Braxton | 517,900 | 513,600 | 531,200 | 533,700 |
| Brooke | 33,300 | 33,300 | 33,600 | 31,600 |
| Calhoun | 2,683,700 | 2,774,500 | 2,872,700 | 2,786,500 |
| Clay | 121,600 | 121,400 | 137,300 | 97,900 |
| Doddridge | 4,316,900 | 4,376,100 | 4,398,100 | 4,174,500 |
| Gilmer | 3,433,800 | 3,561,400 | 3,570,400 | 3,382,500 |
| Harrison | 11,756,100 | 11,657,500 | 11,840,400 | 11,394,800 |
| Jackson | ..... | 4,300 | 11,700 | 11,600 |
| Kanawha | 2,665,900 | 2,742,900 | 2,832,900 | 2,820,900 |
| Lewis | 4,407,900 | 4,399,000 | 4,548,100 | 4,392,400 |
| Lincoln | 65,300 | 61,100 | 61,900 | 60,300 |
| Logan | 31,900 | 34,900 | 31,400 | 30,300 |
| Marion | 2,950,100 | 2,907,900 | 2,875,300 | 2,818,000 |
| Marshall | $ 1,040,500 | $ 1,027,500 | $ 1,037,700 | $ 1,011,700 |
| Mason | ..... | 200 | 6,700 | 6,400 |
| Mingo | 20,400 | 20,800 | 18,500 | 17,200 |
| Monongalia | 907,300 | 911,100 | 906,800 | 833,200 |
| Nicholas | 301,400 | 282,500 | 288,400 | 271,700 |
| Pleasants | 307,900 | 299,500 | 300,000 | 282,700 |
| Preston | ..... | 12,400 | 15,200 | 15,000 |
| Putnam | ..... | 4,200 | 4,800 | 4,500 |
| Raleigh | 3,300 | 3,200 | 3,300 | 3,300 |
| Randolph | 1,400 | 1,400 | 1,400 | 1,300 |
| Ritchie | 3,409,400 | 3,904,300 | 3,733,200 | 3,554,600 |
| Roane | 643,700 | 771,600 | 811,500 | 708,400 |
| Taylor | 156,200 | 143,700 | 166,700 | 160,600 |
| Tyler | 1,551,800 | 1,605,100 | 1,619,300 | 1,547,100 |
| Upshur | 43,200 | 42,500 | 43,200 | 47,300 |
| Wayne | 900 | 900 | 900 | 300 |
| Wetzel | 6,119,300 | 5,987,800 | 6,157,400 | 5,933,500 |
| Wirt | 58,300 | 102,300 | 104,300 | 86,600 |
| Wood | 1,533,700 | 1,492,100 | 1,551,900 | 1,485,400 |
| Total | $51,000,000 | $51,700,000 | $52,400,000 | $50,350,000 |

According to Chapter 11, Article 6, Section 11 of the Revised Code of West Virginia, the Board of Public Works has the duty of assessing and fixing the true and actual value of all public-utility property. The West Virginia Supreme Court of Appeals has said that the income producing capacity of property is an important factor, (*West Penn Power Co.* v. *Board of Review and Equalization*, 112 W. Va. 442 [1932]). In the face of this statute, and of the Court's interpretation, it would be impossible for the West Virginia Board of Public Works to ignore the effect of an order of the Federal Power Commission which might have the effect of limiting the company's annual net earnings to approximately $2,000,000. If this Court should find that a 6½% return is as low a rate as is fair, it would be very difficult also for the Board of Public Works to contend that the Hope Company's net earnings of $2,000,000 could be capitalized at roughly $53,000,000., present valuation.

The Hope Natural Gas Company is also subject to a business or occupation tax, measured by the value of the gas produced by its operated wells. Under Sections 2a and 3a of this production-tax law (West Virginia Revised Code, Chapter 11, Article 13, Sections 2a and 3a), the levy of the tax is fixed at 7.8% of the gross proceeds from sale of the entire production in the State, regardless of the place of sale or the fact that delivery may be made outside the State. Under Section 1 of the same statute, gross "proceeds of sale" are defined as "the value actually received from the sale of tangible property without any deduction on account of the cost of property sold or expense of any kind." In Section 2, provision is made for determining the value of products transported out of the State; and the tax commissioner of the State is directed to prescribe uniform rules for

ascertaining such value. In measuring value by the gross proceeds derived from their sale, the State has recognized, and has given full effect to the various factors of time, place and conditions influencing the marketing of natural resources. Taxable value thus becomes practically the substantial equivalent of market value.

Exhibit 67, Schedule 8 (Sheets 1, 2 and 3), shows the gross sales and production taxes paid by Hope on both intrastate and export sales during the years 1937, 1938 and 1939. The record does not show what production in m. c. f. for each year was used by the State in determining the value of the gas at well: consequently it is not possible to ascertain the precise m. c. f. value. Nevertheless, production figures for those years appearing in the record indicate that the value, thus ascertained by the State, was *at least 16¢ per m. c. f.* Such official determination of well-mouth value by state authorities is entitled to great weight as evidence. On the other hand, if the value of the Hope properties as estimated by the interstate rate-base is to be reduced by almost two-fifths, then obviously the well-mouth value must similarly be reduced. Granted the unit value of the product is thereby depreciated, the production tax yield must be seriously affected.[12a] Undervaluation of the Hope gas lease-holds must thus cost the State of West Virginia hundreds of thousands of dollars in production taxes.[13]

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[12a] Perhaps a minimum estimate of the loss to the State in production taxes might be set forth here. The Federal Power Commission reduced the amount available to the Hope Company for its supply of natural gas by $3,600,000., approximately. Since the tax of 7.8% is based on "the gross proceeds derived from the sale thereof by the producer," (Code of West Virginia, Ch. 11, Art. 13, Sec. 2a), the fall in tax revenue is easily calculated by applying the percentage rate to the reduction in gross income to the Company. The resulting figure of $280,800. represents the immediate cost to West Virginia in production taxes, at the very minimum.

[13] The importance of the production-tax yield to West Virginia can be seen from the following table. (Report of State Tax Commissioner, 1937-1938 and 1939-1940):

The State of West Virginia may now urge before this Court the paramount necessity of the maintenance of its governmental revenues. No arbitrary depreciation of the State's natural resources should be permitted, when the immediate effect of such undervaluation is to cripple the school system and other essential services of the State. The adjustment of the several states within the federal framework of the Constitution surely did not contemplate the impairment of a producing state's tax structure, purely for the benefit of consumers in adjoining industrial states.

The State of West Virginia does not expressly advocate either the prudent-investment or the reproduction-value doctrine in these proceedings; nor does the State urge the approval by this Court of any particular theory of accountancy. The issue is a far graver one. In the adjustment of the several states within the edifice of our federal system, how far may a federal commission regulate the fundamental economy of a producing state?

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Note 13—(Cont'd.)

PRODUCTION TAX

| *Year Ended June 30* | *Coal Production* | *Oil and Gas Production* |
|---|---|---|
| 1935 | $2,547,389.95 | $1,162,396.11 |
| 1936 | 2,279,903.14 | 1,270,322.93 |
| 1937 | 2,620,497.51 | 1,425,529.21 |
| 1938 | 2,454,600.05 | 1,631,540.58 |
| 1939 | 2,125,021.00 | 1,344,415.00 |
| 1940 | 2,699,852.00 | 1,627,145.00 |

| | *Clay, Sand, etc. Production* | *Timber Production* |
|---|---|---|
| 1935 | $167,867.23 | $ 49,050.94 |
| 1936 | 28,153.96 | 65,923.99 |
| 1937 | 56,299.17 | 43,914.35 |
| 1938 | 66,764.65 | 53,167.17 |
| 1939 | | $ 60,362.00 |
| 1940 | | 94,333.00 |

| | *Other Natural Resources* |
|---|---|
| 1940 | $ 6,646.00 |

B. The State Has Likewise a Governmental Interest in the Conservation of Its Natural Resources.

This Court has similarly in the past recognized the interest of the State in the conservation of its natural resources. In *Railroad Commission* v. *Rowan & Nichols Oil Co.*, (310 U. S. 573, 582 [1940], *per* Frankfurter, J.), the Court said:

> "If these wells, most of them small, were restricted to production on the basis of an hourly potential formula, it might be unprofitable to operate them at all. Not only are the individual interests of these small operators involved, but *their effect upon the state's economy is an appropriate factor to be taken into account when plans are devised to keep the wells open.*" (Italics ours.)

That dictum simply reflected the long-continued interest of the Court in matters of state conservation. Starting with *Ohio Oil Company* v. *Indiana*, (177 U. S. 190 [1900]), and continuing on down through *Champlin Refining Co.* v. *Corp. Comm.*, (286 U. S. 210 [1932]), to *Patterson* v. *Stanolind Oil and Gas Co.*, (305 U. S. 376 [1939]), the decisions have consistently favored reasonable statutory and administrative conservation efforts.

The State may now, therefore, represent to this Court how seriously conservation policies will be jeopardized through the present endeavors of the Federal Power Commission to reduce West Virginia leasehold values to a modified "original cost" basis. In three respects at least, the State will suffer:

1. Exploratory development of new fields will be discouraged. Unless the operator profits by the "discovery value" of his new producing lease-

holds, there will be little inducement to undertake "wildcatting" in unproved territory. After all, one well in every five drilled in West Virginia turns out to be a "dry hole";[14] and allocation of the cost of "dry holes" is one of the very issues in the present litigation. With West Virginia's known gas reserves fast diminishing, it is imperative that "wildcat" operations be maintained and encouraged, without penalizing successful development by immediate transfer of its "discovery value" to out-of-state domestic and industrial users.

2. Abandonment of low-yield high-cost marginal wells will be hastened.[15] In the main, the same overhead charges will continue as to smaller producers, regardless of the leasehold valuation. If the leases be undervalued, the net revenue from these older operations will scarcely justify their upkeep. By and large, such wells will then be surrendered far sooner than under existing operating practice. And once a well has been given up and plugged, underlying gas reserves may be lost forever.

3. Secondary recovery of oil,[16] now being undertaken extensively throughout the Appalachian field, will be seriously hampered by arbitrary de-

[14]Tucker, *Future Oil & Gas Supply in Eastern United States*, AMERICAN PETROLEUM INSTITUTE, Minutes of Pittsburgh Meeting, (1943).

[15]As a practical operating decision, Hope abandons wells when the rock pressure reaches 30# in all sands, except the Speechley and the Benson; and 100# in the latter sands. (Exhibit No. 15, p. 15 and R. p. 1053). This decision necessarily depends, in part at least, upon the price received for gas. If that price is reduced, the abandoning pressure will be raised, whereby the rate of well abandonment will be increased.

[16]*Secondary Recovery of Oil in the United States*, AMERICAN PETROLEUM INSTITUTE (1942); *Note* (1942), 49 W. Va. L. Quart. p. 66.

valuation of oil and gas leaseholds. If fugacious minerals are to be undervalued, there is no longer the same incentive to go on with exploratory research in secondary-recovery methods.

Quite apart from these factors, all conservation measures cost money; and when more and more of these measures are utilized, as the gas fields become older, the cost of gas is increased. Decreased leasehold valuation tends to keep such efforts at a minimum; for, after all, the "discovery value" belongs to others. The State has a direct governmental interest in averting such inevitable injury to its natural resources.[17]

C. The State May Intervene to Protect the Interests of Its Citizens Under the Parens Patriae Doctrine, and by Virtue of the Natural Gas Act.

It has been held many times by this Court that, in matters of grave public concern, the State, as representative of its public, has an interest apart from that of the individuals affected. Accordingly, as *perens patriae*, the State may sue to vindicate that public interest, and may uphold the rights of its citizens as against out-of-state wrongdoers. (See, *Missouri* v. *Illinois*, 180 U. S. 208, 241 [1901]; *Kansas* v. *Colorado*, 185 U. S. 125, 142 [1902]; *Georgia* v. *Tennessee Copper Co.*, 206 U. S. 230 [1907]; *New York* v. *New Jersey*, 256 U. S. 296 [1921]; *Wyoming* v. *Colorado*, 259 U. S. 419, 464 [1922]; *Pennsylvania* v. *West Virginia*, 262 U. S. 553 [1923]; *North Dakota* v.

[17] The Federal Power Commission apparently believes the conservation problem is not a serious one. For example, the *Brief for Petitioners*, (p. 76), refers to the change of accounting methods in this language:

> "* * * This change in accounting also recognized the progress then being made in gas and oil exploration and in drilling methods, which was bringing about the discovery of huge resources formerly unknown and unavailable and thus was removing the fear of rapid decrease in supply—the raison d'etre of the former accounting procedure."

*Minnesota*, 263 U. S. 365, 374 [1923]; *Wisconsin* v. *Illinois*, 278 U. S. 367, 409 [1929]; *Kentucky* v. *Indiana*, 281 U. S. 163 [1930]).

There is language in the opinion of *Massachusetts* v. *Mellon*, (262 U. S. 447 [1923]), which might cast doubt upon this general proposition. Holding that a state could not enjoin enforcement of an appropriation act of Congress, Justice Sutherland remarked that a state might not, as *parens patriae*, "institute judicial proceedings to protect citizens of the United States from the operation of the statutes thereof." While no going so far as to say that a state could *never* intervene by suit to protect its citizens against any form of enforcement of unconstitutional acts of Congress, the Court was clear that the right on the part of the state to protest did not arise in the instance of this federal appropriation act. (See, also, *Florida* v. *Mellon*, 273 U. S. 12 [1927]). On the other hand, *Hopkins Federal Savings & Loan Association* v. *Cleary*, 296 U. S. 315 (1935), limited the scope of the *Massachusetts* v. *Mellon* decision. In the course of his opinion, Justice Cardozo said (at page 340):

> "In its capacity of quasi-sovereign, the state repulses an assault upon the quasi-public institutions that are the product and embodiment of its statutes and its policy. Finding them about to deviate from the law of their creation, it is met by the excuse that everything done or purposed is permitted by an Act of Congress. The excuse is inadequate unless the power to give absolution for overstepping such restrictions has been surrendered by the state to the Government in Washington."[15] 80 L. Ed. 261.

[15] Justice Cardozo then added,

"The standing of Wisconsin to resist a trespass on its powers is confirmed if we view the subject from another angle of approach. In the creation of corporations of this quasi-public order and in keeping them thereafter within the limits of their

In other words, the mere fact that the proposed transfer of the "discovery value" of West Virginia's gas deposits over to consumers in adjoining industrial states is permitted by an Act of Congress is wholly inadequate as regards the right of the State to protest against such deliberate spoliation. The natural-gas public utilities of the State must not depart from the duty owed to the citizens of West Virginia.

Nevertheless, without regard to the *parens patriae* doctrine, the Natural Gas Act of 1938 specifically recognizes the interest of the state in the regulation of natural gas undertaken by the Federal Power Commission. Over and over again, the provisions of this statute expressly authorize intervention by the state, or by the political subdivision most directly concerned. (See, for example, 15 U. S. C., Sections 717c[e], 717d, 717j, 717l, 717p, and 717r.) Thus, the Act of Congress has itself definitely recognized in this instance the right of the state to participate on behalf of its citizens. The present brief, as *Amicus Curiae*, now sets forth the grave concern of the State of West Virginia, lest irrevocable harm be done its citizens through the Commission's arbitrary undervaluation of the State's natural resources.

1. *The State of West Virginia, in Common with All States Whose Economy Is Based on the Development of Natural Resources, Is Vitally Interested in the Orderly Marketing of Its Mineral Wealth, so that the True Value of These Minerals May Be*

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charters, the state is parens patriae, acting in a spirit of benevolence for the welfare of its citizens. Shareholders and creditors have assumed a relation to the business in the belief that the assets will be protected by all the power of the government against use for other ends than those stated in the charter. Aside from the direct interest of the state in the preservation of agencies established for the common good, there is thus the duty of the parens patriae to keep faith with those who have put their trust in the parental power. * * *"

*Returned to the State's Total Resources, as the Wasting Assets Become Exhausted.*

The State of West Virginia, as *parens patriae*, is interested in ensuring for its citizens the orderly marketing of its mineral resources. (See *Railroad Commission* v. *Rowan & Nichols Oil Co.*, 310 U. S. 573 [1940]). In short, the State may now intervene on behalf of its people, in order to avert the serious consequence of a grossly unfair undervaluation of its natural gas resources by the Federal Power Commission. This litigation directly concerns one of the great industries of the State; and its importance is such that any harm to the industry must inevitably affect the welfare of a very large group of its citizenry.

Perhaps the effect of the undervaluation of West Virginia's gas deposits might be indicated in terms of the well-mouth gas prices. Exhibit No. 49 represents an analysis of natural gas purchased and prices paid during the three-year period 1937-1939, by the twelve largest utilities operating in West Virginia. The record shows that the price paid for gas varies, according to the county and section of the State; for example, Exhibit 79 (Table V) shows gas purchased by South Penn Natural Gas Company in Boone and Kanawha Counties, in the southern part of the State, was priced at approximately twelve cents per m. c. f. On the other hand, in the central and northern parts of the State, gas was bought by South Penn at prices ranging from seventeen cents to twenty-two cents per m. c. f. In any event, purchases made by other companies, not connected with the Hope System, occurred at an average price of fifteen cents per m. c. f. It is not unreasonable, therefore, to assume that the well-mouth market-value of gas produced in the Hope territory was in the neighborhood of *fifteen cents per m. c. f.*, as of 1938, when the Natural Gas Act became effective.

In contrast to the foregoing, a further analysis has been made to determine *the exact part of the total income* under the rates set by the Federal Power Commission order, which might become available to cover the well-mouth price of the gas produced by the Hope wells, after paying all expenses other than well-expense. (This analysis is printed in Appendix I, to the present Brief). In order to ascertain that well-mouth price, all items of operating revenue and deductions have been carefully segregated (other than those specifically applicable to well-head or well-mouth production). On completion of such analysis and segregation of items, the remaining revenue left to cover the well-mouth price for producing natural gas is set forth by the following summary:

| | |
|---|---|
| Other Production Expenses (Col. 5) | $ 967,929 |
| Gas Purchased Expense (Col. 7) | 7,379,437 |
| Transmission Expense (Col. 8) | 4,080,598 |
| Total Expense for other than Gas Produced | $12,686,898 |
| Amount Allowed for Gas Produced | 3,258,934 |
| Total of Recommended Gross Revenue per page 54 of Opinion | $15,686,898 |

Continuing with this summation of well-mouth price-estimates, an analysis of Exhibit 69A shows that the volume of gas produced by the Hope-owned wells in 1940 was, in round figures, about twenty-seven million m. c. f. The allowance of $3,258,898 by the Federal Power Commission for Hope-produced gas, at the well-mouth, is therefore *about twelve cents per m. c. f.* If even as little as one-half of the delay rentals be transferred to general or other expense, the well-mouth allowance is reduced to approximately *ten cents per m. c. f.*; should any adjustment be made for federal income taxes or reclassification

and rate-case expenses, the allowed well-mouth price will be even further reduced. In short, these analyses conclusively establish that the recommended reduction in rates will result in a well-mouth price for Hope-produced gas which is *from three to five cents per m. c. f. less than the going-market price*. Hope gas is to be valued by the Federal Power Commission at ten or twelve cents per m. c. f.: open-market purchases of gas in the Hope territory have occurred at an average price of fifteen cents per m. c. f., hence, were the Federal Power Commission order now to be sustained, Hope would be compelled to sell its product at a price less than the cost of gas in producing regions.

Serious as the Federal Power Commission's order may be in thus reducing gas prices below cost, the City of Cleveland's proposal is even more disastrous for the gas industry. It was contended by counsel for the City of Cleveland, in the reply brief before the Federal Power Commission, that rates should be fixed which would net the Hope Company only 3.64¢ per m. c. f., for some ten million-odd m. c. f. of gas to be consumed. In other words, it is thus the position of the City that gas should be delivered to Ohio consumers *at less than one-fourth of its actual value* in West Virginia. Surely the very nature of this proposal indicates the background of the decision by the Federal Power Commission.[19]

2. *The State of West Virginia Must Be Assured that a Reasonable Price Will Be Fixed for the Interstate Gas Traffic, in Order that the Values of Other Competing Natural Fuels Produced Within the State May Be Properly Safeguarded.*

An equally important consideration here concerns the competition of natural gas in the open market with coal,

[19]The proposal of the City of Cleveland in this regard has been set forth in detail in Appendix II to this Brief.

oil and other fuels. Of course, natural gas does not enjoy a monopoly like electricity or water, for which there are no practicable substitutes. But consumer-demand for gas is substantially voluntary; if the price be too high, consumers can, and do, shift to other forms of fuel. Indeed, such a change from gas to coal was actually recommended by the Commission's engineer, (R. pp. 4439-4444), for the Hastings Compressor Station of the Hope Company. Yet the converse is also true. If natural gas be materially cheapened, consumers will turn to that fuel in preference to coal or oil. In consequence, an arbitrary and unfair undervaluation of natural gas will have the effect in West Virginia, in the long run, of depreciating further the price of West Virginia coal and oil. If there were no other reason to be furnished here, the very circumstance that West Virginia's competing fuel industries would be injured by such confiscatory administrative action as to its natural gas might amply justify the State in intervening on behalf of its citizens. (See, as to the nature of the competition between natural gas and the coal industry, *Brief on Behalf of Legislation Imposing an Excise Tax on Natural Gas*, (1934), submitted to the Division of Economic Research and Planning of NRA, by the National Coal Association and the United Mine Workers of America).

3. *The State of West Virginia May Insist that the Prices Now Fixed for Natural Gas Will Protect and Conserve the Supply of Its Various Constituent Hydrocarbons for Future Demands of the Chemical Industry.*

Finally, there is one further factor to be borne in mind. The exhibits in this case show that West Virginia natural gas is composed of butane, ethane, pentane, propane and many extremely valuable lighter hydrocarbons. For ex-

ample, a very considerable proportion of butane is yielded from these natural gas deposits, which becomes of great importance in the production of butadiene for synthetic rubber purposes. In some respects, indeed, West Virginia gas is unique in its chemical composition, because so many of these relatively scarce hydrocarbons are present. It is not unreasonable to infer from this very situation that an expansion of the chemical industry will produce a vastly-increased demand for the refining of natural gas. Were that eventuality to come about in the face of a diminishing gas supply in West Virginia, it is reasonably possible that the use of natural gas for fuel purposes might be deliberately discouraged. That is to say, West Virginia gas would be far too valuable to be utilized merely for ordinary fuel-consumption purposes. Neither the present leasehold valuations nor the consequent well-mouth prices even take into consideration the existence of so important a factor. (See Price and Headlee, *Geochemistry of Natural Gas in Appalachian Province*, [1924] 26 Bulletin of American Association of Petroleum Geologists 19).[20]

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[20] If the principles applied by the Commission in this case are upheld, then West Virginia must abandon all hope of that bright economic future whose dawn is just now disclosed by the rising sun of technological research. What shall it profit West Virginia that silk stockings can be made from gas, that alcohol obtained from gas makes rubber, that American soldiers ride the skies in parachutes made from gas, that in gas are found those hydrocarbons whose atoms can be rearranged by men of science into products as yet unknown to commerce? From all these and the wealth they promise, West Virginia must resolutely turn away, for the wealth the State might otherwise expect must henceforth and forevermore be restricted to a mere non-confiscatory return upon the original cost of the facilities used to produce the gas. Raigorodsky and Dotterweich, *War Products from Natural Gas and Natural Gasoline*, (1943), 14 PETROLEUM ENGINEER, 198, 203: "Constant vigilance on the part of the petroleum industry relative to the great potential possibilities of natural gas and natural gasoline will not only materially aid in the production of war products required by our armed forces but will place this industry in a most advantageous position to convert to the production of the immense quantities of synthetic consumer goods that will most assuredly come with the return to peace."

D. The State May In This Litigation Represent the Interests of West Virginia Lessors of Natural Gas.

It has already been indicated that natural gas is developed in West Virginia through a long-established method of leasing, by which the operator develops the land-owner's gas on a royalty basis. That owner retains his rent-receiving reversion, along with his legal right to cancel the outstanding lease in the event of abandonment or forfeiture; and the lessor's reversion is thus a valuable and well-defined property interest. However, the Federal Power Commission has utterly ignored the existing legal position as regards the West Virginia lessor. In effect, the Commission has insisted upon treating the Hope Company as though this operator were the sole owner in fee simple of all natural gas deposits involved in this litigation.

This Court will take judicial notice of the commonly-recognized fact that West Virginia is not an agricultural state, nor one which is suited for ordinary farming purposes. Its resources are largely those of mineral wealth, so that reasonable development of the State's coal, oil and gas has been the basis of its economy. In this connection, it might be said, ownership of fugacious minerals in fee simple has been for decades a rule of property law in West Virginia, (*Williamson* v. *Jones*, 39 W. Va. 231, 10 S. E. 436, [1894]; *Wilson* v. *Youst*, 43 W. Va. 826, 28 S. E. 781, [1897]; and *Preston* v. *Young*, 57 W. Va. 278, 50 S. E. 236, [1905]). Complete legal protection has always been given to the reversioner's interest, in the judicial treatment of the oil and gas leasehold. Now, for the first time, it is proposed to do away with such a fundamental doctrine of West Virginia

legal theory, and to regard the operator as the sole spokesman for the fee ownership of natural gas.

In two respects, at least, the result is fraught with serious consequences. On the one hand, no attention has been paid to the lessor's rent-receiving reversion; whether this be fixed on a gas-well rental basis or whether a one-eighth gas royalty has been stipulated. The Federal Power Commission may assert that the inclusion of rentals and royalties in operating expenses amply protects the lessor; and perhaps that would be true, were all the lessor's revenues actually contractual gas-well rentals. However, most modern West Virginia leases are now executed on a one-eighth gas-royalty basis, so that the well-mouth price of gas becomes the standard of the reversioner's compensation. It is once more arguing in a circle to assume that operating expenses can determine the amount of the farmer's income from the gas well, when the ultimate question is the precise price of gas,—which is to determine his one-eighth royalty. On the other hand, apart from the gas-well rental and gas royalty issue under the Natural Gas Act, no interstate producer can abandon either facilities or service without the Commission's approval, (15 U. S. C. 717f[b]); so the rule of *Pennsylvania* v. *West Virginia* has now become statutory law. Lessors have accordingly devoted their gas rights to an interstate public use. It would seem that the farmer cannot in the future withdraw his gas from the established current of interstate gas traffic. In short, the gas-owner's reversion has become public-utility property.

Even though a lessor has these vital interests in his rents and in the future of his reversion, the Federal Power Commission is unwilling to recognize that ownership. The State of West Virginia may thus insist that

no regulation of a local gas industry can be complete, unless the rights of the reversioner have been taken into full account. So long as the West Virginia farmer's best crop comes from the gas well on his land, the Commission must take that property interest into consideration in the working out of the State's future economy.

E. The State Has a Proprietary Interest In Leasehold Valuation, as Owner of Gas Deposits Under Public Lands.

According to the Constitution of West Virginia, (Constitution, Article XIII, Section 3), the State is owner of all waste and unappropriated lands. Among such unappropriated land is the bed of the Ohio River, which is held directly as the property of the State of West Virginia; and valuable mineral interests are known to underlie this river-bed. Moreover, the Public Land Corporation of West Virginia,—a governmental corporation,—has now been vested with the title of the State in other public lands, such as forfeited and unredeemed tax-delinquent properties, (West Virginia Revised Code, Chapter 37, Article 2A). Thus, West Virginia must be regarded as owner in fee simple of much land scattered throughout the State.

As land-owner, the State of West Virginia has a direct property interest in the protection of its gas deposits. It may, therefore, insist upon their proper valuation, and upon the orderly marketing of all underlying gas deposits. Unless the State now intervenes to protect its own natural gas, the administrative methods of valuation and marketing may be finally adjudged in the present proceeding. Accordingly, it is submitted that a reasonably fair valuation of leaseholds should be established, so as to create adequate markets in the future for all State-owned gas resources.

II

**The Federal Power Commission Has Disregarded the Specific Intent of Congress That the Provisions of the Natural Gas Act Shall Not Apply to Production Properties.**

In this case, the Commission has applied the provisions of the Natural Gas Act to the business of producing and gathering natural gas, contrary to the express language of Sec. 1 (b) of the Act, reading:

> "The provisions of this Act * * * shall not apply * * * to the production or gathering of natural gas."

The rate ordered by the Commission is calculated by adding together two principal components, i. e., (1) an allowance for the expense of interstate transportation, plus a return upon properties devoted to transportation, and (2) an allowance for the expense of production, plus a return upon properties devoted to production. The amounts included in the rate base and in expense are separately determined for transportation and for production in the Commission's opinion. In determination of the rate base, Hope's properties are separated into three general classes which are given the following designations by the Commission:

> Natural Gas Production Plant
> Transmission Plant
> General Plant

The Commission's opinion shows that it applied the provisions of the Act to all phases of the natural gas industry, beginning at the bottom of the well and continuing to the end of the transmission system.

The Commission investigated the original cost of drilling each hole and of the casing, tubing and other equip-

ment of each well. The same investigation was made of gathering lines. It likewise investigated the original cost of the leaseholds owned by Hope, and made a determination as between operated and unoperated acreage. From these investigations the Commission ascertained what it finds to be the original cost of the natural gas production plant and the amount of depreciation and depletion accrued therein to date. It also determined that part of the cost of certain of Hope's wells should be deducted from the total because such cost had been charged to operating expenses in previous years. Thus, the cost-finding and accounting provisions of the Act were applied to Hope's production and gathering properties. Having made these determinations, the Commission thereupon proceeded to apply the rate-making provisions of the Act to production and gathering properties. It added the cost of production properties to the cost of transmission properties and used the aggregate cost of all properties as the basic amount from which the rate-base was determined.

During the more than forty years of its existence, Hope has taken leases on more than 4,100,000 acres of land in West Virginia; leases on 3,150,000 acres have been cancelled; constant turnover and shifting of leases are involved, new leases being taken, and leases being cancelled and renewed and cancelled again, as discoveries are made. (Hope Exhibit No. 23, Methods of Gas Exploration and Development in West Virginia). The connection between such activities and the interstate transportation and sale of gas is remote. But their connection with the production of gas is immediate and direct. The Commission further extended the Act to regulation of the amount to be expended for future exploration and development, and of the amount to be included in expense for the cost of abandoning wells. The provisions of the

Act were thus applied to lands, leases, leaseholds and wells and will regulate the value of natural gas, not only at the well mouth before it enters interstate commerce, but while the gas is still in the ground, and the value of gas lands and gas leases. The effect of this regulation upon the resources of the state and counties and the properties of private landowners has been discussed elsewhere in this Brief.

Natural gas as an article of commerce is purchased and sold in an "open market" in which "fair market value" exists. The West Virginia Supreme Court has held that in establishing intrastate rates for natural gas, the utility will be charged with the *fair market value* of gas sold for out-of-state delivery to affiliated companies. (*Charleston v. Public Service Commission*, 95 W. Va. 91 [1923]; points 6 and 8 of official syllabi by Court.) In that case the contract price to the parent companies was less than fair market value. Under the Commission's order in the present case, the price Hope may charge for gas sold to its affiliates is fixed by regulation at less than market value. We concede that a fair return to their common stockholders upon the combined values of Hope's property and the property of its affiliates will satisfy constitutional demands. But the Commission's order, by disregarding the market value of gas, has appropriated to Hope's interstate customers an undue proportion of the total income of all affiliated companies; and in any future intrastate rate regulation by West Virginia, the market value of gas delivered to affiliates can no longer be included in total income, and only the value as fixed by the Commission may be so included. The West Virginia Court will apparently be compelled to change its rate-making principles.

Production of natural gas—the reduction of it to possession by wells bored from the surface—is a local or

state activity, subject to regulation by the state. (*Ohio Oil Co.* v. *Indiana*, 177 U. S. 190, 44 L. Ed. 729 [1900]). The state's rights to control and regulate oil wells were recently affirmed. (*Champlin Refining Co.* v. *Corporation Commission*, 286 U. S. 210, 76 L. Ed. 1062 [1932]; *Railroad Commission* v. *Rowan & Nichols Oil Co.*, 310 U. S. 573, 84 L. Ed. 1368 [1940]).

The local or interstate character of the business of producing gas, as it is conducted by Hope and now subjected by the Commission to the provisions of the Natural Gas Act, was adjudicated by the Supreme Court of West Virginia in (*Suttle, Adm'r.* v. *Hope Natural Gas Company*, 82 W. Va. 729 [1918]). Erecting a derrick to be used in cleaning one of Hope's gas wells to accelerate its production was the activity involved. West Virginia's Court said:

• • •

> "Hence it becomes necessary to consider whether the work which the deceased was doing was clearly separable and distinguishable from interstate commerce. Until reduced to possession by confinement, natural gas, it is said, though somewhat inaccurately, partakes of the nature of ferae naturae. It is not the subject of ownership till brought to the surface and confined, and of course cannot become the subject of interstate commerce till its ownership becomes complete by confinement in the ordinary, indeed the only competent, mode of transportation, pipe line conduits. The well reaches down to the gas bearing strata and releases the gas there confined, but until it reaches the surface and enters the pipe for transmission to the interstate trunk lines, it is not in interstate commerce. The production department of the gas industry is clearly separable from the transporting or marketing branch. All work in con-

nection with the production of gas, that is, with bringing it to the surface where it may be confined and reduced to possession, is local in nature and clearly separable and distinguishable from the marketing or interstate portion of the industry."

• • •

It will not be presumed that Congress intended to confer any jurisdiction over such local or state activity to the Federal Power Commission, (*Federal Trade Commission* v. *Bunte Brothers*, 312 U. S. 349, 85 L. Ed. 881 [1941]). In (*Kirchbaum* v. *Walling*, 316 U. S. 517 [1942]), this Court said:

"To a considerable extent the task is one of accommodation as between assertions of new federal authority and historic functions of the individual states. The expansion of our industrial economy has inevitably been reflected in the extension of federal authority over economic enterprise and its absorption of authority previously possessed by the States. Federal legislation of this character cannot therefore be construed without regard to the implications of our dual system of government.

"We cannot, therefore, indulge in loose assumption that when Congress adopts a new scheme for federal industrial regulation, it thereby deals with all situations falling within the general mischief which gave rise to the legislation. Such an assumption might be valid where remedy of the mischief is the concern of only a single unitary government. It cannot be accepted where the practicalities of federalism—or, more precisely, the underlying assumptions of our dual form of government and the consequent presuppositions of legislative draftsmanship which are expressive

of our history and habits—cut across what might otherwise be the implied range of the legislation. Congress may choose, as it has chosen frequently in the past, to regulate only part of what it constitutionally can regulate, leaving to the States activities which, if isolated, are only local.

"* * * The history of congressional legislation regulating not only interstate commerce as such but also activities intertwined with it, justifies the generalization that, when the federal government takes over such local radiations in the vast network of our national economic enterprise and thereby radically readjusts the balance of state and national authority, those charged with the duty of legislating are reasonably explicit and do not entrust its attainment to that restrospective expansion of meaning which properly deserves the stigma of judicial legislation. * * *"

It may be argued that authority to so apply the provisions of the Act to the business of producing natural gas may be drawn from other sections of the Act. Section 5 (b), for instance, gives the Commission authority to investigate and determine the cost of the production of natural gas by a natural gas company in cases where it has no authority to establish rates. Section 6 (a) gives the Commission authority to investigate and ascertain the actual legitimate cost of the property of every natural gas company. Section 9 (a) gives the Commission authority to determine rates of depreciation and amortization of production property. Section 10 (a) enables the Commission to require filing of reports including cost of facilities and of maintenance and operation of facilities for production of gas. Section 14 (b) permits the Commission to determine the adequacy or inadequacy of reserves. In only one of these sections did Congress use language implying that the result of any such determina-

tions might be reflected in the establishment of a rate. This provision is contained in Section 14 (b) where the Commission is authorized to determine the propriety and reasonableness of including delay rentals, or other forms of rental or compensation for unoperated lands and leases, in operating expenses, capital or surplus.

To hold that these other sections give the Commission authority to apply its rate making principles to the production of gas, beginning with lands and leases both operated and unoperated and continuing from the bottom of the well to the end of the transmission system, makes the latter sections override Section 1 (b) and completely destroy it. No part of the natural gas industry related to interstate transportation and sale, to which the negative language of Section 1 (b) can apply, would remain.

In acertaining the scope of this legislation and in thus applying the provisions of the Act to production properties and that part of the gas business devoted to production of gas, the Commission had no regard whatsoever for a proper adjustment of local and national interests in our federal scheme. (*Federal Trade Commission* v. *Bunte Brothers*, 312 U. S. 349, 85 L. Ed. 881 [1941]). On the contrary, it wholly ignored the interests local to West Virginia and with an eye single to interests local to Ohio and Pennsylvania, applied the Act to every phase of the gas business and drastically reduced the values of gas and gas producing lands in West Virginia.

The manner in which the Commission has applied the Act to the local activity of producing gas, and its inescapable regulation of local economy, are perilously close to an invasion of the sovereignty or quasi-sovereignty of West Virginia, and of a field of autonomy preserved against federal encroachment by the Tenth Amendment. (*Hopkins Federal Savings & Loan Assn.* v. *Cleary*, 296 U. S. 315, 80 L. Ed. 251 [1935]).

Moreover, Hope Construction & Refining Company operates some natural gas wells and about one thousand (1000) oil wells producing casinghead gas (R. 4252). Its gas from dry gas wells and its casinghead gas from oil wells is sold to Hope and becomes an integral part of the gas from which gasoline and butane are extracted and of the mass of gas delivered to consumers by Hope. The recommended method of handling the income of Hope Construction & Refining Company will be fatal to the gasoline extraction business and to experimental research in West Virginia, or at least to that part of the business conducted by affiliates of the natural gas companies.

## III

## The Proper Adjustment of Local and National Interests Necessitates Modification of the Federal Power Commission Order.

If we were unable to suggest formulas upon which rates for interstate transportation and sale of gas might be established other than the formula followed by the Commission, considerable force might be lent to the Commission's construction of the Act. However, at least one other way was suggested to the West Virginia Public Service Commission in 1926 by a Federal Court. That was the case of (*United Fuel Gas Company* v. *Public Service Commission*, 14 Fed. [2d] 209, affirmed 278 U. S. 322 [1929]), involving, among others, the vexatious problem of the value to be given natural gas reserves—that and other problems, the Court said, were difficult or impossible to solve. The solution suggested was (1) that the value of the utility's *tangible* property be ascertained with an allowance for working capital and going concern value, which would represent all upon which a return should be earned and depreciation and amortization allowed, and (2) that *the fair market value of gas delivered*

*to customers* be added to the outlay for operating expenses and taxes in determining whether the rate was sufficient to cover a return and an allowance for depreciation and amortization. That the suggestion was dictum may be admitted, but the decision was by a three-judge statutory court.

In its brief and argument before the Commission, West Virginia urged that there must be separate determination of the value of gas at the well mouth based upon the going market value in the field where the gas is produced; that such amount having been determined the interstate rate might be established by adding thereto the allowance for operating expenses, depreciation, taxes and return on the transportation system. This is consistent with *Hope Natural Gas Company* v. *Hall*, (102 W. Va. 272, affirmed 274 U. S. 284 [1927]), approving ascertainment of the value or worth of gas *in West Virginia* for tax purposes. Of course, we do not mean to imply that these are the only formulas that can be devised for applying the Act with proper adjustment of local and national interests.

Natural gas, as a fuel or as the raw material for commercial products, is marketed in competition with coal and oil. (see *Appalachian Coals, Inc.* v. *U. S.*, 288 U. S. 344, 361-362 [1933]). Its worth for either use is relative and is controlled by comparison of its values with the values contained in coal and oil. The competitive relationship between gas and coal as fuel is dramatically illustrated in this case by the recommendation of the Commission's gas engineer that during periods of peak demand for gas the power requirements of Hope's system be obtained by using coal instead of gas as fuel, (Record, pp. 4439-4444). Nor does all natural gas have the same worth. Its content of methane, ethane and nitro-

gen, and its heating value vary as between fields and as between wells. From the standpoint of the owner of a supply of natural gas, its proximity to markets is an economic advantage over more distant fields. All of these considerations affect value. None of them have been given any consideration by the Commission.

Ascertaining the going-market price of gas at the well mouth is difficult but not impossible. For fifty years business men in West Virginia have done it, and billions of feet of gas have changed hands on their judgments as to its price, thousands of leases have been purchased and sold, well drilling operations have been started or stopped, pipe lines built and capital investments made. Any regulatory commission can make the determination if it will accept the same evidence that ordinary reasonable men accept. The difficulty has been to produce evidence which a regulatory Commission could not constitutionally ignore. The Commission partially investigated it in the present case. Its staff prepared and filed an exhibit entitled "Analysis of Natural Gas Purchased and Prices Paid by Utilities in West Virginia." (Exhibit No. 49.) In this exhibit the staff analyzed all purchases made in West Virginia by the twelve largest utilities during the three years 1937, 1938 and 1939. Tables III, IV and V filed with this exhibit show that such utilities paid thirteen cents or more per m. c. f. for approximately sixty per centum of their gas. The exhibit shows, and we freely concede, that conditions of delivery vary widely and the price named in one purchase contract may not be comparable with the price named in other contracts. But adjustments may be made to correct such variations and the exhibit contains this statement: "The prices presented here are representative of West Virginia natural gas prices because they include more than 90% of such purchases." (Page 2 of Exhibit.)

In the three years covered by this exhibit, the gas purchases by the twelve utilities was roughly seventy per centum of the State's total production.

Ascertainment of the prices paid for the gas not purchased by the twelve utilities, including unregulated sales to industrial plants, presents no insuperable problem. Analysis of all sales, regulated as well as unregulated, with proper adjustments for sales between affiliates that are not arm length sales and other adjustments, would disclose the well mouth market price or market value of West Virginia gas. A rate based thereon would reflect the value of gas as a fuel and as the raw material for products of commerce, and the effects thereon of competition and the myriad factors that make market prices. Of a value thus determined, West Virginia cannot and would not complain.

All of Hope's properties, transportation properties as well as production properties, lie, and all of its business is done, within the borders of West Virginia. Assessment of such properties for taxation in order that they may bear their full share of the burden of State and local government is in consequence a matter of extreme importance to the State. If, through the action of the Federal Power Commission, any property has been eliminated from the assets of the company, assessed values will immediately be affected.

Of course, there could be no physical elimination of any property from assets. Such elimination would be accomplished, however, by a method of rate regulation, which, when principles of assessment for taxation were applied to the result, would necessarily require omission of property from the tax base.

Properties of natural gas companies in West Virginia are assessed by the Board of Public Works at their true

and actual value, (*Code of West Virginia*, Chap. 11, Art. 6, Sec. 11). Value is an economic fact. For public utilities it is to some extent a result of rates; and the amount of value which will result from a given rate base can in part be estimated. (*Dorety, The Function of Reproduction Cost*, 37 Harvard Law Review, 173 at 189.) The principles governing the ascertainment of value for the purpose of taxation are the same as those that control in condemnation cases, confiscation cases, and generally in controversies involving the ascertainment of just compensation. (See *Great Northern Railway Company* v. *Weeks*, 297 U. S. 135, 80 Law. Ed. 532 [1935]).

When West Virginia comes to apply the principles which govern the ascertainment of the value of Hope's property for taxation, it cannot ignore the impact upon earnings resulting from the Commission's regulation of Hope's rates. If any property has been omitted from the rate base so that no earnings can accrue thereon, West Virginia cannot continue to retain the value of such property in the tax base. This is not required by any provisions of constitutions or statutes. It is rather because reason and experience have taught that sterile property, property which has lost the power to produce profit, ultimately becomes worthless in the commercial world, and things which become worthless in the commercial world sooner or later cease to be the subjects of taxation. Furthermore, the omission of this item of property from the rate base necessarily reduces the gross proceeds derived from the sale of gas upon which West Virginia levies a tax for the privilege of engaging in the business of producing gas, (*Code of West Virginia*, Chap. 11, Art. 13).

Going concern value was wholly omitted from the rate base on which the commission permitted Hope to earn a return. The rate base is frankly and openly restricted

to actual depreciated cost. Going concern value need not be separately stated if it is otherwise included in the rate base, but when original cost alone is used, it cannot be claimed that going concern value was included.

To a considerable extent, the Commission determined Hope's rate of return upon considerations indicating recognition of elements of going concern value. The company's efficient management, it said, and its established markets, its available supply of gas, its financial record, its affiliations and prospective business placed it in a strong position to attract capital upon favorable terms when it is required. Hope, says the Commission, is a seasoned enterprise whose risks have been minimized. These are the reasons given for prescribing a rate of return of 6½%. They were equally cogent reasons for appraising the physical assets as an assembled whole rather than at their mere original cost.

As indicated elsewhere in this Brief, this is not merely a contest between the utility concerned and consumers in Ohio and Pennsylvania. The contest involves the welfare of West Virginia and its citizens. West Virginia asserts that it was unjust to its welfare to omit from the basic value base, from which both rates and taxes must hereafter be computed, an item of property so long considered legitimate by State and Federal Courts and regulatory commissions, and that no rate thus determined is just and reasonable as required by the Natural Gas Act.

## CONCLUSION

From the foregoing discussion in the presen' Brief as Amicus Curiae, the order of the Federal Power Commission has been shown to be arbitrary and confiscatory, to the extent that the Commission has wholly refused to view the effect of its drastic rulings upon the economy and

well-being of the producing state, considering only the interests of out-of-state consumers. The State of West Virginia urges, therefore, that the judgment of the Circuit Court of Appeals be affirmed, and that these proceedings be returned to the Commission with appropriate directions from this Court that the Natural Gas Act be administered according to the federal nature of the Constitution.

Respectfully submitted,

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October 19, 1943.

## APPENDIX I

## Statement Showing That Commission's Order Establishes Well-Mouth Value of Gas at Not Exceeding $.1216 Per M. C. F.

| *Operating Expenses as Adjusted for Future (FPC Opinion No. 76, p. 54 and 55)* | *Operating Expenses, (including return) Adjusted for Future* (1) | *Adjusting Increased Payroll Allowance* (2) | *Adjusted Operating Expenses (including returns) as Adjusted for Future* (3) | *Distribution of Adjusted Operating Expenses for Future Production* | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | *Wells* (4) | *Other* (5) | *Total* (6) | *Gas Purchased* (7) | *Transmission* (8) |
| *Interstate Operating Expenses:* | | | | | | | | |
| Natural Gas Production | 1,430,102 | (114,078) | 1,316,024 | 1,354,011 | (37,987) | 1,316,024 | | |
| Exploration & Development Costs | 600,000 | | 600,000 | 600,000 | | 600,000 | | |
| Gas Purchased | 8,533,779 | 8,656 | 8,542,435 | | | | 8,542,435 | |
| Transmission Expenses | 1,818,335 | 93,857 | 1,912,192 | | | | | 1,912,192 |
| Administrative & General Expenses | 1,137,094 | 11,565 | 1,148,659 | 298,159 | 225,570 | 523,729 | 42,281 | 582,649 |
| Depletion | 624,440 | | 624,440 | 624,440 | | 624,440 | | |
| Depreciation | 835,597 | | 835,597 | 6,681 | 353,417 | 360,098 | | 475,499 |
| Amortization (other) | 5,996 | | 5,996 | 5,996 | | 5,996 | | |
| Taxes—State & Misc. Fed. | 1,211,012 | | 1,211,012 | 414,537 | 234,935 | 649,472 | | 561,540 |
| Federal Income Tax | 76,579 | | 76,579 | 9,978 | 2,937 | 12,915 | 25,374 | 38,290 |
| Total Interstate | 16,272,934 | | 16,272,934 | 3,313,802 | 778,872 | 4,092,674 | 8,610,090 | 3,570,170 |
| Other Gas Revenues | (83,275) | | (83,275) | (8,280) | | (8,280) | | (74,995) |
| Allocation of Costs to Local W. Va. Sales | (2,694,075) | | (2,694,075) | (548,783) | (267,522) | (816,305) | (1,230,653) | (647,117) |
| Return at 6½% on Interstate Rate Base of 33,712,526 | 2,191,314 | | 2,191,314 | 502,195 | 456,579 | 958,774 | | 1,232,540 |
| Operating Revenues—Interstate Sales | 15,686,898 | | 15,686,898 | 3,258,934 | 967,929 | 4,226,863 | 7,379,437 | 4,080,598 |
| Well Mouth Allowance per 26,800,000 mcf produced | | | .1216¢ | | | | | |
| Well Mouth Allowance per 26,800,000 mcf produced excluding exploration and development costs | | | .0992¢ | | | | | |

# APPENDIX II

## Reply Brief of City of Cleveland Before the Federal Power Commission

(September 30, 1941)

Table 12, Page 104

DIRECT COSTS OF PRODUCTION OF GAS (EXCLUSIVE OF RETURN) AND INCREMENT OF DIRECT COSTS. YEAR 1940 OVER 1939

| | Ex. 67 1939 | Exhibit 78 1940 | Increment Costs—1940 over 1939 |
|---|---|---|---|
| Direct Expenses of Producing Gas, Excl. of Depreciation and Depletion (Ex. 67, pp. 17, 39; Ex. 78, pp. 17, 23) | | | |
| 734.1 Gas Well Labor | $ 330,338.52 | $ 347,147.21 | |
| 735.1 Gas Well Supplies and Expenses | 130,999.56 | 164,662.01 | |
| 741 Maint. of Prod. Gas Well Equip. | 53,457.92 | 83,242.02 | |
| 745 Gas Well Royalties | 828,851.62 | 885,841.27 | |
| Total Direct Gas Well Expenses | 1,343,647.62 | 1,480,892.51 | |
| Gross Production Tax | 144,633.15 | 221,908.58 | |
| Total, Incl. Production Tax | 1,448,280.77 | 1,702,801.09 | |
| Depreciation and Depletion (Ex. 78, p. 54) | | | |
| Operated Acreage | $ 36,772.47 | $ 57,084.00 | |
| Gas Well Construction | 182,755.43 | 286,492.00 | |
| Cost of Abandoning | 69,813.58 | 105,860.00 | |
| Total Depletion | 289,341.48 | 449,436.00 | |
| Depreciation of Gas Well Equipment (Ex. 61, p. 21; 78, p. 26) | 188,482.85 | 186,702.97 | |
| Total Depreciation and Depletion | $ 477,824.33 | $ 636,138.97 | |
| Volume of Gas Produced—M. c. f. (Ex. 78, p. 54) | 16,546,230 | 26,800,000 | 10,253,770 |

| | Ex. 67 1939 | Exhibit 78 1940 | Increment Costs—1940 over 1939 |
|---|---|---|---|
| Direct Expenses per M.c.f. Produced | | | |
| 734.1 Gas Well Labor | 2.00¢ | 1.29¢ | |
| 735.1 Gas Well Supplies and Expenses | .79 | .61 | |
| 741 Maint. of Prod. Gas Well Equip. | .32 | .31 | |
| 745 Gas Well Royalties | 5.01 | 3.31 | |
| Total Direct Gas Well Expenses | 8.12 | 5.52 | |
| Gross Production Tax | .87 | .83 | |
| Total, incl. Production Tax | 8.99¢ | 6.35¢ | |
| Depreciation and Depletion Per M. c. f. Produced: | | | |
| Depletion | 1.75¢ | 1.68¢ | |
| Depreciation of Gas Well Equipment | 1.14 | .70 | |
| Total Depreciation and Depletion | 2.89¢ | 2.38¢ | |
| Total Direct Costs of Producing Gas, Incl. Depreciation and Depletion: | | | |
| Amount | $1,966,105.10 | $ 2,338,940.06 | $372,834.96 |
| Per M. c. f. Produced | 11.88¢ | 8.73¢ | 3.64¢ |

N. B. It has been the contention of the City of Cleveland, as set forth above, that something over ten million cubic feet of natural gas should be sold by the Hope Company at a unit price of 3.64¢ per M. C. F.

Frankfurter p. 3
Jackson p. 26

# SUPREME COURT OF THE UNITED STATES.

Nos. 34 and 35.—October Term, 1943.

Federal Power Commission, City of Akron and Pennsylvania Public Utility Commission, Petitioners,
34 vs.
Hope Natural Gas Company.

City of Cleveland, Petitioner,
35 vs.
Hope Natural Gas Company.

On Writs of Certiorari to the United States Circuit Court of Appeals for the Fourth Circuit.

[January 3, 1944.]

Mr. Justice Douglas delivered the opinion of the Court.

The primary issue in these cases concerns the validity under the Natural Gas Act of 1938 (52 Stat. 821, 15 U. S. C. § 717) of a rate order issued by the Federal Power Commission reducing the rates chargeable by Hope Natural Gas Co., 44 P. U. R. (N. S.) 1. On a petition for review of the order made pursuant to § 19(b) of the Act, the Circuit Court of Appeals set it aside, one judge dissenting. 134 F. 2d 287. The cases are here on petitions for writs of certiorari which we granted because of the public importance of the questions presented.

Hope is a West Virginia corporation organized in 1898. It is a wholly owned subsidiary of Standard Oil Co. (N. J.). Since the date of its organization, it has been in the business of producing, purchasing and marketing natural gas in that state.[1] It sells some of that gas to local consumers in West Virginia. But the great bulk of it goes to five customer companies which receive it at the West Virginia line and distribute it in Ohio and in Pennsylvania.[2] In July, 1938 the cities of Cleveland and Akron filed complaints with the Commission charging that

[1] Hope produces about one-third of its annual gas requirements and purchases the rest under some 300 contracts.

[2] These five companies are the East Ohio Gas Co., the Peoples Natural Gas Co., the River Gas Co., the Fayette County Gas Co., and the Manufacturers Light & Heat Co. The first three of these companies are, like Hope, sub-

the rates collected by Hope from East Ohio Gas Co. (an affiliate of Hope which distributes gas in Ohio) were excessive and unreasonable. Later in 1938 the Commission on its own motion instituted an investigation to determine the reasonableness of all of Hope's interstate rates. In March 1939 the Public Utility Commission of Pennsylvania filed a complaint with the Commission charging that the rates collected by Hope from Peoples Natural Gas Co. (an affiliate of Hope distributing gas in Pennsylvania) and two non-affiliated companies were unreasonable. The City of Cleveland asked that the challenged rates be declared unlawful and that just and reasonable rates be determined from June 30, 1939 to the date of the Commission's order. The latter finding was requested in aid of state regulation and to afford the Public Utilities Commission of Ohio a proper basis for disposition of a fund collected by East Ohio under bond from Ohio consumers since June 30, 1939. The cases were consolidated and hearings were held.

On May 26, 1942, the Commission entered its order and made its findings. Its order required Hope to decrease its future interstate rates so as to reflect a reduction, on an annual basis, of not less than $3,609,857 in operating revenues. And it established "just and reasonable" average rates per m. c. f. for each of the five customer companies.[3] In response to the prayer of the City of Cleveland the Commission also made findings as to the lawfulness of past rates, although concededly it had no authority under the Act to fix past rates or to award reparations. 44 P. U. R. (N. S.) p. 34. It found that the rates collected by Hope from East Ohio were unjust, unreasonable, excessive and there-

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sidiaries of Standard Oil Co. (N. J.). East Ohio and River distribute gas in Ohio, the other three in Pennsylvania. Hope's approximate sales in m. c. f. for 1940 may be classified as follows:

| | |
|---|---|
| Local West Virginia sales | 11,000,000 |
| East Ohio | 40,000,000 |
| Peoples | 10,000,000 |
| River | 400,000 |
| Fayette | 860,000 |
| Manufacturers | 2,000,000 |

Hope's natural gas is processed by Hope Construction & Refining Co., an affiliate, for the extraction of gasoline and butane. Domestic Coke Corp., another affiliate, sells coke-oven gas to Hope for boiler fuel.

[3] These required minimum reductions of 7¢ per m. c. f. from the 36.5¢ and 35.5¢ rates previously charged East Ohio and Peoples, respectively, and 3¢ per m. c. f. from the 31.5¢ rate previously charged Fayette and Manufacturers.

fore unlawful, by $830,892 during 1939, $3,219,551 during 1940, and $2,815,789 on an annual basis since 1940. It further found that just, reasonable, and lawful rates for gas sold by Hope to East Ohio for resale for ultimate public consumption were those required to produce $11,528,608 for 1939, $11,507,185 for 1940 and $11,910,947 annually since 1940.

The Commission established an interstate rate base of $33,712,526 which, it found, represented the "actual legitimate cost" of the company's interstate property less depletion and depreciation and plus unoperated acreage, working capital and future net capital additions. The Commission, beginning with book cost, made certain adjustments not necessary to relate here and found the "actual legitimate cost" of the plant in interstate service to be $51,957,416, as of December 31, 1940. It deducted accrued depletion and depreciation, which it found to be $22,328,016 on an "economic-service-life" basis. And it added $1,392,021 for future net capital additions, $566,105 for useful unoperated acreage, and $2,125,000 for working capital. It used 1940 as a test year to estimate future revenues and expenses. It allowed over $16,000,000 as annual operating expenses—about $1,300,000 for taxes, $1,460,000 for depletion and depreciation, $600,000 for exploration and development costs, $8,500,000 for gas purchased. The Commission allowed a net increase of $421,160 over 1940 operating expenses, which amount was to take care of future increase in wages, in West Virginia property taxes, and in exploration and development costs. The total amount of deductions allowed from interstate revenues was $13,495,584.

Hope introduced evidence from which it estimated reproduction cost of the property at $97,000,000. It also presented a so-called trended "original cost" estimate which exceeded $105,000,000. The latter was designed, "to indicate what the original cost of the property would have been if 1938 material and labor prices had prevailed throughout the whole period of the piecemeal construction of the company's property since 1898." 44 P. U. R. (N. S.), pp. 8-9. Hope estimated by the "per cent condition" method accrued depreciation at about 35% of reproduction cost new. On that basis Hope contended for a rate base of $66,000,000. The Commission refused to place any reliance on reproduction cost new, saying that it was "not predicated upon facts" and was "too conjectural and illusory to be given any weight in these proceedings." *Id.*, p. 8. It likewise refused to give any

"probative value" to trended "original cost" since it was "not founded in fact" but was "basically erroneous" and produced "irrational results." *Id.*, p. 9. In determining the amount of accrued depletion and depreciation the Commission, following *Lindheimer* v. *Illinois Bell Telephone Co.*, 292 U. S. 151, 167-169; *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 592-593, based its computation on "actual legitimate cost". It found that Hope during the years when its business was not under regulation did not observe "sound depreciation and depletion practices" but "actually accumulated an excessive reserve"[4] of about $46,000,000. *Id.*, p. 18. One member of the Commission thought that the entire amount of the reserve should be deducted from "actual legitimate cost" in determining the rate base.[5] The majority of the Commission concluded, however, that where, as here, a business is brought under regulation for the first time and where incorrect depreciation and depletion practices have prevailed, the deduction of the reserve requirement (actual existing depreciation and depletion) rather than the excessive reserve should be made so as to lay "a sound basis for future regulation and control of rates." *Id.*, p. 18. As we have pointed out, it determined accrued depletion and depreciation to be $22,328,016; and it allowed approximately $1,460,000 as the annual operating expense for depletion and depreciation.[6]

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[4] The book reserve for interstate plant amounted at the end of 1938 to about $18,000,000 more than the amount determined by the Commission as the proper reserve requirement. The Commission also noted that "twice in the past the company has transferred amounts aggregating $7,500,000 from the depreciation and depletion reserve to surplus. When these latter adjustments are taken into account, the excess becomes $25,500,000, which has been exacted from the ratepayers over and above the amount required to cover the consumption of property in the service rendered and thus to keep the investment unimpaired." 44 P. U. R. (N. S.), p. 22.

[5] That contention was based on the fact that "every single dollar in the depreciation and depletion reserves" was taken "from gross operating revenues whose only source was the amounts charged customers in the past for natural gas. It is, therefore, a fact that the depreciation and depletion reserves have been contributed by the customers and do not represent any investment by Hope." *Id.*, p. 40. And see Railroad Commission v. Cumberland Tel. & T. Co., 212 U. S. 414, 424-425; 2 Bonbright, Valuation of Property (1937), p. 1139.

[6] The Commission noted that the case was "free from the usual complexities involved in the estimate of gas reserves because the geologists for the company and the Commission presented estimates of the remaining recoverable gas reserves which were about one per cent apart." 44 P. U. R. (N. S.), pp. 19-20.

The Commission utilized the "straight-line-basis" for determining the depreciation and depletion reserve requirements. It used estimates of the

Hope's estimate of original cost was about $69,735,000—approximately $17,000,000 more than the amount found by the Commission. The item of $17,000,000 was made up largely of expenditures which prior to December 31, 1938, were charged to operating expenses. Chief among those expenditures was some $12,600,000 expended in well-drilling prior to 1923. Most of that sum was expended by Hope for labor, use of drilling-rigs, hauling, and similar costs of well-drilling. Prior to 1923 Hope followed the general practice of the natural gas industry and charged the cost of drilling wells to operating expenses. Hope continued that practice until the Public Service Commission of West Virginia in 1923 required it to capitalize such expenditures, as does the Commission under its present Uniform System of Accounts.[7] The Commission refused to add such items to the rate base stating that "No greater injustice to consumers could be done than to allow items as operating expenses and at a later date include them in the rate base, thereby placing multiple charges upon the consumers." *Id.*, p. 12. For the same reason the Commission excluded from the rate base about $1,600,000 of expenditures on properties which Hope acquired from other utilities, the latter having charged those payments to operating expenses. The Commission disallowed certain other overhead items amounting to over $3,000,000 which also had been previously charged to operating expenses. And it refused to add some $632,000 as interest during construction since no interest was in fact paid.

Hope contended that it should be allowed a return of not less than 8%. The Commission found that an 8% return would be unreasonable but that 6½% was a fair rate of return. That rate of return, applied to the rate base of $33,712,526, would

average service lives of the property by classes based in part on an inspection of the physical condition of the property. And studies were made of Hope's retirement experience and maintenance policies over the years. The average service lives of the various classes of property were converted into depreciation rates and then applied to the cost of the property to ascertain the portion of the cost which had expired in rendering the service.

The record in the present case shows that Hope is on the lookout for new sources of supply of natural gas and is contemplating an extension of its pipe line into Louisiana for that purpose. The Commission recognized in fixing the rates of depreciation that much material may be used again when various present sources of gas supply are exhausted, thus giving that property more than scrap value at the end of its present use.

[7] See Uniform System of Accounts prescribed for Natural Gas Companies effective January 1, 1940, Account No. 332.1.

produce $2,191,314 annually, as compared with the present income of not less than $5,801,171.

The Circuit Court of Appeals set aside the order of the Commission for the following reasons. (1) It held that the rate base should reflect the "present fair value" of the property, that the Commission in determining the "value" should have considered reproduction cost and trended original cost, and that "actual legitimate cost" (prudent investment) was not the proper measure of "fair value" where price levels had changed since the investment. (2) It concluded that the well-drilling costs and overhead items in the amount of some $17,000,000 should have been included in the rate base. (3) It held that accrued depletion and depreciation and the annual allowance for that expense should be computed on the basis of "present fair value" of the property not on the basis of "actual legitimate cost".

The Circuit Court of Appeals also held that the Commission had no power to make findings as to past rates in aid of state regulation. But it concluded that those findings were proper as a step in the process of fixing future rates. Viewed in that light, however, the findings were deemed to be invalidated by the same errors which vitiated the findings on which the rate order was based.

*Order Reducing Rates.* Congress has provided in § 4(a) of the Natural Gas Act that all natural gas rates subject to the jurisdiction of the Commission "shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful." Sec. 5(a) gives the Commission the power, after hearing, to determine the "just and reasonable rate" to be thereafter observed and to fix the rate by order. Sec. 5(a) also empowers the Commission to order a "decrease where existing rates are unjust . . . unlawful, or are not the lowest reasonable rates." And Congress has provided in § 19(b) that on review of these rate orders the "finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive." Congress, however, has provided no formula by which the "just and reasonable" rate is to be determined. It has not filled in the details of the general prescription[8] of § 4(a)

[8] Sec. 6 of the Act comes the closest to supplying any definite criteria for rate making. It provides in subsection (a) that, "The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear on the determination of such

and § 5(a). It has not expressed in a specific rule the fixed principle of "just and reasonable".

When we sustained the constitutionality of the Natural Gas Act in the *Natural Gas Pipeline Co.* case, we stated that the "authority of Congress to regulate the prices of commodities in interstate commerce is at least as great under the Fifth Amendment as is that of the States under the Fourteenth to regulate the prices of commodities in intrastate commerce." 315 U. S. p. 582. Rate-making is indeed but one species of price-fixing. *Munn* v. *Illinois*, 94 U. S. 113, 134. The fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid. *Block* v. *Hirsh*, 256 U. S. 135, 155-157; *Nebbia* v. *New York*, 291 U. S. 502, 523-539 and cases cited. It does, however, indicate that "fair value" is the end product of the process of rate-making not the starting point as the Circuit Court of Appeals held. The heart of the matter is that rates cannot be made to depend upon "fair value" when the value of the going enterprise depends on earnings under whatever rates may be anticipated.[9]

We held in *Federal Power Commission* v. *Natural Gas Pipeline Co.*, *supra*, that the Commission was not bound to the use of any single formula or combination of formulae in determining rates. Its rate-making function, moreover, involves the making of "pragmatic adjustments." *Id.*, p. 586. And when the Commission's order is challenged in the courts, the question is whether that order "viewed in its entirety" meets the requirements of the Act. *Id.*, p. 586. Under the statutory standard of "just and reasonable" it is the result reached not the method employed which is controlling. Cf. *Los Angeles Gas & Electric Corp.* v. *Railroad Commission*, 289 U. S. 287, 304-305, 314; *West Ohio Gas Co.* v. *Commission* (No. 1), 294 U. S. 63, 70; *West* v. *Chesapeake & Potomac Tel.*

cost or depreciation and the fair value of such property." Subsection (b) provides that every natural-gas company on request shall file with the Commission a statement of the "original cost" of its property and shall keep the Commission informed regarding the "cost" of all additions, etc.

[9] We recently stated that the meaning of the word "value" is to be gathered "from the purpose for which a valuation is being made. Thus the question in a valuation for rate making is how much a utility will be allowed to earn. The basic question in a valuation for reorganization purposes is how much the enterprise in all probability can earn." Institutional Investors v. Chicago, M., St. P. & P. R. Co., 318 U. S. 523, 540.

*Co.*, 295 U. S. 662, 692-693 (dissenting opinion). It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important. Moreover, the Commission's order does not become suspect by reason of the fact that it is challenged. It is the product of expert judgment which carries a presumption of validity. And he who would upset the rate order under the Act carries the heavy burden of making a convincing showing that it is invalid because it is unjust and unreasonable in its consequences. Cf. *Railroad Commission* v. *Cumberland Tel. & T. Co.*, 212 U. S. 414; *Lindheimer* v. *Illinois Tel. Co., supra*, pp. 164, 169; *Railroad Commission* v. *Pacific Gas & E. Co.*, 302 U. S. 388, 401.

The rate-making process under the Act, i. e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests. Thus we stated in the *Natural Gas Pipeline Co.* case that "regulation does not insure that the business shall produce net revenues." 315 U. S. p. 590. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. *Chicago & Grand Trunk Ry. Co.* v. *Wellman*, 143 U. S. 339, 345-346. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. See *Missouri ex rel. Southwestern Bell Tel. Co.* v. *Public Service Commission*, 262 U. S. 276, 291 (Mr. Justice Brandeis concurring). The conditions under which more or less might be allowed are not important here. Nor is it important to this case to determine the various permissible ways in which any rate base on which the return is computed might be arrived at. For we are of the view that the end result in this case cannot be condemned under the Act as unjust and unreasonable from the investor or company viewpoint.

We have already noted that Hope is a wholly owned subsidiary of the Standard Oil Co. (N. J.). It has no securities outstanding except stock. All of that stock has been owned by Standard since 1908. The par amount presently outstanding is approximately $28,000,000 as compared with the rate base of $33,712,526 established by the Commission. Of the total outstanding stock $11,000,000 was issued in stock dividends. The balance, or about $17,000,000, was issued for cash or other assets. During the four decades of its operations Hope has paid over $97,000,000 in cash dividends. It had, moreover, accumulated by 1940 an earned surplus of about $8,000,000. It had thus earned the total investment in the company nearly seven times. Down to 1940 it earned over 20% per year on the average annual amount of its capital stock issued for cash or other assets. On an average invested capital of some $23,000,000 Hope's average earnings have been about 12% a year. And during this period it had accumulated in addition reserves for depletion and depreciation of about $46,000,000. Furthermore, during 1939, 1940 and 1941, Hope paid dividends of 10% on its stock. And in the year 1942, during about half of which the lower rates were in effect, it paid dividends of 7½%. From 1939-1942 its earned surplus increased from $5,250,000 to about $13,700,000, i. e., to almost half the par value of its outstanding stock.

As we have noted, the Commission fixed a rate of return which permits Hope to earn $2,191,314 annually. In determining that amount it stressed the importance of maintaining the financial integrity of the company. It considered the financial history of Hope and a vast array of data bearing on the natural gas industry, related businesses, and general economic conditions. It noted that the yields on better issues of bonds of natural gas companies sold in the last few years were "close to 3 per cent", 44 P. U. R. (N. S.), p. 33. It stated that the company was a "seasoned enterprise whose risks have been minimized" by adequate provisions for depletion and depreciation (past and present) with "concurrent high profits", by "protected established markets, through affiliated distribution companies, in populous and industralized areas", and by a supply of gas locally to meet all requirements, "except on certain peak days in the winter, which it is feasible to supplement in the future with gas from other sources." *Id.*, p. 33. The Commission concluded, "The company's efficient management, established markets, financial rec-

ord, affiliations, and its prospective business place it in a strong position to attract capital upon favorable terms when it is required." *Id.*, p. 33.

In view of these various considerations we cannot say that an annual return of $2,191,314 is not "just and reasonable" within the meaning of the Act. Rates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce only a meager return on the so-called "fair value" rate base. In that connection it will be recalled that Hope contended for a rate base of $66,000,000 computed on reproduction cost new. The Commission points out that if that rate base were accepted, Hope's average rate of return for the four-year period from 1937-1940 would amount to 3.27%. During that period Hope earned an annual average return of about 9% on the average investment. It asked for no rate increases. Its properties were well maintained and operated. As the Commission says such a modest rate of 3.27% suggests an "inflation of the base on which the rate has been computed." *Dayton Power & Light Co.* v. *Public Utilities Commission*, 292 U. S. 290, 312. Cf. *Lindheimer* v. *Illinois Bell Tel. Co.*, *supra*, p. 164. The incongruity between the actual operations and the return computed on the basis of reproduction cost suggests that the Commission was wholly justified in rejecting the latter as the measure of the rate base.

In view of this disposition of the controversy we need not stop to inquire whether the failure of the Commission to add the $17,000,000 of well-drilling and other costs to the rate base was consistent with the prudent investment theory as developed and applied in particular cases.

Only a word need be added respecting depletion and depreciation. We held in the *Natural Gas Pipeline Co.* case that there was no constitutional requirement "that the owner who embarks in a wasting-asset business of limited life shall receive at the end more than he has put into it." 315 U. S. p. 593. The Circuit Court of Appeals did not think that that rule was applicable here because Hope was a utility required to continue its service to the public and not scheduled to end its business on a day certain as was stipulated to be true of the Natural Gas Pipeline

Co. But that distinction is quite immaterial. The ultimate exhaustion of the supply is inevitable in the case of all natural gas companies. Moreover, this Court recognized in *Lindheimer* v. *Illinois Bell Tel. Co., supra,* the propriety of basing annual depreciation on cost.[10] By such a procedure the utility is made whole and the integrity of its investment maintained.[11] No more is required.[12] We cannot approve the contrary holding of *United Railways* v. *West,* 280 U. S. 234, 253-254. Since there are no constitutional requirements more exacting than the standards of the Act, a rate order which conforms to the latter does not run afoul of the former.

*The Position of West Virginia.* The State of West Virginia, as well as its Public Service Commission, intervened in the proceedings before the Commission and participated in the hearings before it. They have also filed a brief *amicus curiae* here and have participated in the argument at the bar. Their contention is that the result achieved by the rate order "brings consequences which are unjust to West Virginia and its citizens" and which "unfairly depress the value of gas, gas lands and gas leaseholds, unduly restrict development of their natural resources, and arbitrarily transfer their properties to the residents of other states without just compensation therefor."

West Virginia points out that the Hope Natural Gas Co. holds a large number of leases on both producing and unoperated properties. The owner or grantor receives from the operator or grantee delay rentals as compensation for postponed drilling. When a producing well is successfully brought in, the gas lease custo-

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[10] Chief Justice Hughes said in that case (292 U. S. pp. 168-169): "If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods. But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered and thus to keep its investment unimpaired, but to secure additional plant and equipment upon which the utility expects a return."

[11] See Mr. Justice Brandeis (dissenting) in United Railways v. West, 280 U. S. 234, 259-288, for an extended analysis of the problem.

[12] It should be noted that the Act provides no specific rule governing depletion and depreciation. Sec. 9(a) merely states that the Commission "may from time to time ascertain and determine, and by order fix, the proper and adequate rates of depreciation and amortization of the several classes of property of each natural-gas company used or useful in the production, transportation, or sale of natural gas."

marily continues indefinitely for the life of the field. In that case the operator pays a stipulated gas-well rental or in some cases a gas royalty equivalent to one-eighth of the gas marketed.[13] Both the owner and operator have valuable property interests in the gas which are separately taxable under West Virginia law. The contention is that the reversionary interests in the leaseholds should be represented in the rate proceedings since it is their gas which is being sold in interstate commerce. It is argued, moreover, that the owners of the reversionary interests should have the benefit of the "discovery value" of the gas leaseholds, not the interstate consumers. Furthermore, West Virginia contends that the Commission in fixing a rate for natural gas produced in that State should consider the effect of the rate order on the economy of West Virginia. It is pointed out that gas is a wasting asset with a rapidly diminishing supply. As a result West Virginia's gas deposits are becoming increasingly valuable. Nevertheless the rate fixed by the Commission reduces that value. And that reduction, it is said, has severe repercussions on the economy of the State. It is argued in the first place that as a result of this rate reduction Hope's West Virginia property taxes may be decreased in view of the relevance which earnings have under West Virginia law in the assessment of property for tax purposes.[14] Secondly, it is pointed out that West Virginia has a production tax[15] on the "value" of the gas exported from the State. And we are told that for purposes of that tax "value" becomes under West Virginia law "practically the substantial equivalent of market value." Thus West Virginia argues that undervaluation of Hope's gas leaseholds will cost the State many thousands of dollars in taxes. The effect, it is urged, is to impair West Virginia's tax structure for the benefit of Ohio and Pennsylvania consumers. West Virginia emphasizes, moreover, its deep interest in the conservation of its natural resources including its natural gas. It says that a reduction of the value of these leasehold values will jeopardize these conservation policies in three respects: (1) exploratory development of new fields will be discouraged; (2) abandonment of low-yield high-cost marginal wells will be hastened;

[13] See Simonton, The Nature of the Interest of the Grantee Under an Oil and Gas Lease (1918), 25 W. Va. L. Quar. 295.

[14] West Penn Power Co. v. Board of Review, 112 W. Va. 442.

[15] W. Va. Rev. Code of 1943, ch. 11, Art. 13, §§ 2a, 3a.

and (3) secondary recovery of oil will be hampered. Furthermore, West Virginia contends that the reduced valuation will harm one of the great industries of the State and that harm to that industry must inevitably affect the welfare of the citizens of the State. It is also pointed out that West Virginia has a large interest in coal and oil as well as in gas and that these forms of fuel are competitive. When the price of gas is materially cheapened, consumers turn to that fuel in preference to the others. As a result this lowering of the price of natural gas will have the effect of depreciating the price of West Virginia coal and oil.

West Virginia insists that in neglecting this aspect of the problem the Commission failed to perform the function which Congress entrusted to it and that the case should be remanded to the Commission for a modification of its order.[16]

We have considered these contentions at length in view of the earnestness with which they have been urged upon us. We have searched the legislative history of the Natural Gas Act for any indication that Congress entrusted to the Commission the various considerations which West Virginia has advanced here. And our conclusion is that Congress did not.

We pointed out in *Illinois Natural Gas Co.* v. *Public Service Co.*, 314 U. S. 498, 506, that the purpose of the Natural Gas Act was to provide, "through the exercise of the national power over interstate commerce, an agency for regulating the wholesale distribution to public service companies of natural gas moving interstate, which this Court had declared to be interstate commerce not subject to certain types of state regulation." As stated in the House Report the "basic purpose" of this legislation was "to occupy" the field in which such cases as *Missouri* v. *Kansas Gas Co.*, 265 U. S. 298, and *Public Utilities Commission* v. *Attleboro Steam & Electric Co.*, 273 U. S. 83, had held the States might not act. H. Rep. No. 709, 75th Cong., 1st Sess., p. 2. In accomplishing that purpose the bill was designed to take "no authority from State commissions" and was "so drawn as to complement and in no manner usurp State regulatory authority." *Id.*, p. 2. And the Federal Power Commission was given no authority over the "production or gathering of natural gas." § 1(b).

[16] West Virginia suggests as a possible solution (1) that a "going concern value" of the company's tangible assets be included in the rate base and (2) that the fair market value of gas delivered to customers be added to the outlay for operating expenses and taxes.

The primary aim of this legislation was to protect consumers against exploitation at the hands of natural gas companies. Due to the hiatus in regulation which resulted from the *Kansas Gas Co.* case and related decisions state commissions found it difficult or impossible to discover what it cost interstate pipe-line companies to deliver gas within the consuming states; and thus they were thwarted in local regulation. H. Rep., No. 709, *supra*, p. 3. Moreover, the investigations of the Federal Trade Commission had disclosed that the majority of the pipe-line mileage in the country used to transport natural gas, together with an increasing percentage of the natural gas supply for pipe-line transportation, had been acquired by a handful of holding companies.[17] State commissions, independent producers, and communities having or seeking the service were growing quite helpless against these combinations.[18] These were the types of problems with which those participating in the hearings were pre-occupied.[19] Congress addressed itself to those specific evils.

The Federal Power Commission was given broad powers of regulation. The fixing of "just and reasonable" rates (§ 4) with the powers attendant thereto[20] was the heart of the new regulatory system. Moreover, the Commission was given certain authority by § 7(a), on a finding that the action was necessary or desirable "in the public interest," to require natural gas companies to extend or improve their transportation facilities and to sell gas to any authorized local distributor. By § 7(b) it was given control over the abandonment of facilities or of service. And by § 7(c), as originally enacted, no natural gas company could undertake the construction or extension of any facilities for the transportation of natural gas to a market in which natural gas was already being served by another company, or sell any natural gas in such a market, without obtaining a certificate of public convenience and necessity from the Commission. In passing on such applications for

[17] S. Doc. 92, Pt. 84-A, ch. XII, Final Report, Federal Trade Commission to the Senate pursuant to S. Res. No. 83, 70th Cong., 1st Sess.

[18] S. Doc. 92, Pt. 84-A, chs. XII, XIII, *op. cit., supra*, note 17.

[19] See Hearings on H. R. 11662, Subcommittee of House Committee on Interstate & Foreign Commerce, 74th Cong., 2d Sess.; Hearings on H. R. 4008, House Committee on Interstate & Foreign Commerce, 75th Cong., 1st Sess.

[20] The power to investigate and ascertain the "actual legitimate cost" of property (§ 6), the requirement as to books and records (§ 8), control over rates of depreciation (§ 9), the requirements for periodic and special reports (§ 10), the broad powers of investigation (§ 14) are among the chief powers supporting the rate making function.

certificates of convenience and necessity the Commission was told by § 7(c); as originally enacted, that it was "the intention of Congress that natural gas shall be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use at the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest." The latter provision was deleted from § 7(c) when that subsection was amended by the Act of February 7, 1942, 56 Stat. 83. By that amendment limited grandfather rights were granted companies desiring to extend their facilities and services over the routes or within the area which they were already serving. Moreover, § 7(c) was broadened so as to require certificates of public convenience and necessity not only where the extensions were being made to markets in which natural gas was already being sold by another company but in other situations as well.

These provisions were plainly designed to protect the consumer interests against exploitation at the hands of private natural gas companies. When it comes to cases of abandonment or of extensions of facilities or service, we may assume that, apart from the express exemptions[21] contained in § 7, considerations of conservation are material to the issuance of certificates of public convenience and necessity. But the Commission was not asked here for a certificate of public convenience and necessity under § 7 for any proposed construction or extension. It was faced with a determination of the amount which a private operator should be allowed to earn from the sale of natural gas across state lines through an established distribution system. Secs. 4 and 5, not § 7, provide the standards for that determination. We cannot find in the words of the Act or in its history the slightest intimation or suggestion that the exploitation of consumers by private operators through the maintenance of high rates should be allowed to continue provided the producing states obtain indirect benefits from it. That apparently was the Commission's view of the matter, for the same arguments advanced here were presented to the Commission and not adopted by it.

We do not mean to suggest that Congress was unmindful of the interests of the producing states in their natural gas supplies

[21] Apart from the grandfather clause contained in § 7(c), there is the provision of § 7(f) that a natural gas company may enlarge or extend its facilities within the "service area" determined by the Commission without any further authorization.

when it drafted the Natural Gas Act. As we have said, the Act does not intrude on the domain traditionally reserved for control by state commissions; and the Federal Power Commission was given no authority over "the production or gathering of natural gas." § 1(b). In addition, Congress recognized the legitimate interests of the States in the conservation of natural gas. By § 11 Congress instructed the Commission to make reports on compacts between two or more States dealing with the conservation, production and transportation of natural gas.[22] The Commission was also directed to recommend further legislation appropriate or necessary to carry out any proposed compact and "to aid in the conservation of natural-gas resources within the United States and in the orderly, equitable, and economic production, transportation, and distribution of natural gas." § 11(a). Thus Congress was quite aware of the interests of the producing states in their natural gas supplies.[23] But it left the protection of those interests to measures other than the maintenance of high rates to private companies. If the Commission is to be compelled to let the stockholders of natural gas companies have a feast so that the

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[22] See P. L. 117, approved July 7, 1943, containing an "Interstate Compact to Conserve Oil and Gas" between Oklahoma, Texas, New Mexico, Illinois, Colorado, and Kansas.

[23] As we have pointed out, § 7(c) was amended by the Act of February 7, 1942 (56 Stat. 83) so as to require certificates of public convenience and necessity not only where the extensions were being made to markets in which natural gas was already being sold by another company but to other situations as well. Considerations of conservation entered into the proposal to give the Act that broader scope. H. Rep. No. 1290, 77th Cong., 1st Sess., pp. 2-3. And see Annual Report, Federal Power Commission (1940) pp. 79, 80; Baum, The Federal Power Commission and State Utility Regulation (1942), p. 261.

The bill amending § 7(c) originally contained a subsection (h) reading as follows: "Nothing contained in this section shall be construed to affect the authority of a State within which natural gas is produced to authorize or require the construction or extension of facilities for the transportation and sale of such gas within such State: Provided, however, That the Commission, after a hearing upon complaint or upon its own motion, may by order forbid any intrastate construction or extension by any natural-gas company which it shall find will prevent such company from rendering adequate service to its customers in interstate or foreign commerce in territory already being served." See Hearings on H. R. 5249, House Committee on Interstate & Foreign Commerce, 77th Cong., 1st Sess., pp. 7, 11, 21, 29, 32-33. In explanation of its deletion the House Committee Report stated, pp. 4-5: "The increasingly important problems raised by the desire of several States to regulate the use of the natural gas produced therein in the interest of consumers within such States, as against the Federal power to regulate interstate commerce in the interest of both interstate and intrastate consumers, are deemed by the committee to warrant further intensive study and probably a more detailed and comprehensive plan for the handling thereof than that which would have been provided by the stricken subsection."

producing states may receive crumbs from that table, the present Act must be redesigned. Such a project raises questions of policy which go beyond our province.

It is hardly necessary to add that a limitation on the net earnings of a natural gas company from its interstate business is not a limitation on the power of the producing state either to safeguard its tax revenues from that industry[24] or to protect the interests of those who sell their gas to the interstate operator.[25] The return which the Commission allowed was the net return after all such charges.

It is suggested that the Commission has failed to perform its duty under the Act in that it has not allowed a return for gas production that will be enough to induce private enterprise to perform completely and efficiently its functions for the public. The Commission, however, was not oblivious of those matters. It considered them. It allowed, for example, delay rentals and exploration and development costs in operating expenses.[26] No serious attempt has been made here to show that they are inadequate. We certainly cannot say that they are, unless we are to substitute our opinions for the expert judgment of the administrators to whom Congress entrusted the decision. Moreover, if in light of experience they turn out to be inadequate for development of new sources of supply, the doors of the Commission are open for increased allowances. This is not an order for all time. The Act contains machinery for obtaining rate adjustments. § 4.

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[24] We have noted that in the annual operating expenses of some $16,000,000 the Commission included West Virginia and federal taxes. And in the net increase of $421,160 over 1940 operating expenses allowed by the Commission was some $80,000 for increased West Virginia property taxes. The adequacy of these amounts has not been challenged here.

[25] The Commission included in the aggregate annual operating expenses which it allowed some $8,500,000 for gas purchased. It also allowed about $1,400,000 for natural gas production and about $600,000 for exploration and development.

It is suggested, however, that the Commission in ascertaining the cost of Hope's natural gas production plant proceeded contrary to § 1(b) which provides that the Act shall not apply to "the production or gathering of natural gas". But such valuation, like the provisions for operating expenses, is essential to the rate-making function as customarily performed in this country. Cf. Smith, The Control of Power Rates in the United States and England (1932), 159 The Annals 101. Indeed § 14(b) of the Act gives the Commission the power to "determine the propriety and reasonableness of the inclusion in operating expenses, capital, or surplus of all delay rentals or other forms of rental or compensation for unoperated lands and leases."

[26] See note 25, *supra*.

But it is said that the Commission placed too low a rate on gas for industrial purposes as compared with gas for domestic purposes and that industrial uses should be discouraged. It should be noted in the first place that the rates which the Commission has fixed are Hope's interstate wholesale rates to distributors not interstate rates to industrial users[27] and domestic consumers. We hardly can assume, in view of the history of the Act and its provisions, that the resales intrastate by the customer companies which distribute the gas to ultimate consumers in Ohio and Pennsylvania are subject to the rate-making powers of the Commission.[28] But in any event those rates are not in issue here. Moreover, we fail to find in the power to fix "just and reasonable" rates the power to fix rates which will disallow or discourage resales for industrial use. The Committee Report stated that the Act provided "for regulation along recognized and more or less standardized lines" and that there was "nothing novel in its provisions". H. Rep. No. 709, *supra*, p. 3. Yet if we are now to tell the Commission to fix the rates so as to discourage particular uses, we would indeed be injecting into a rate case a "novel" doctrine which has no express statutory sanction. The same would be true if we were to hold that the wasting-asset nature of the industry required the maintenance of the level of rates so that natural gas companies could make a greater profit on each unit of gas sold. Such theories of rate-making for this industry may or may not be desirable. The difficulty is that § 4(a) and § 5(a) contain only the conventional standards of rate-making for natural gas companies.[29] The Act of February 7, 1942, by broadening § 7 gave

[27] The Commission has expressed doubts over its power to fix rates on "direct sales to industries" from interstate pipelines as distinguished from "sales for resale to the industrial customers of distributing companies." Annual Report, Federal Power Commission (1940), p. 11.

[28] Sec. 1(b) of the Act provides: "The provisions of this Act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas." And see § 2(6), defining a "natural-gas company", and H. Rep. No. 709, *supra*, pp. 2, 3.

[29] The wasting-asset characteristic of the industry was recognized prior to to the Act as requiring the inclusion of a depletion allowance among operating expenses. See Columbus Gas & Fuel Co. v. Public Utilities Commission, 292 U. S. 398, 404-405. But no such theory of rate-making for natural gas companies as is now suggested emerged from the cases arising during the earlier period of regulation.

the Commission some additional authority to deal with the conservation aspects of the problem.[30] But § 4(a) and § 5(a) were not changed. If the standard of "just and reasonable" is to sanction the maintenance of high rates by a natural gas company because they restrict the use of natural gas for certain purposes, the Act must be further amended.

It is finally suggested that the rates charged by Hope are discriminatory as against domestic users and in favor of industrial users. That charge is apparently based on § 4(b) of the Act which forbids natural gas companies from maintaining "any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service." The power of the Commission to eliminate any such unreasonable differences or discriminations is plain. § 5(a). The Commission, however, made no findings under § 4(b). Its failure in that regard was not challenged in the petition to review. And it has not been raised or argued here by any party. Hence the problem of discrimination has no proper place in the present decision. It will be time enough to pass on that issue when it is presented to us. Congress has entrusted the administration of the Act to the Commission not to the courts. Apart from the requirements of judicial review it is not for us to advise the Commission how to discharge its functions.

*Findings as to the Lawfulness of Past Rates.* As we have noted, the Commission made certain findings as to the lawfulness of past rates which Hope had charged its interstate customers. Those findings were made on the complaint of the City of Cleveland and in aid of state regulation. It is conceded that under the Act the Commission has no power to make reparation orders. And its power to fix rates admittedly is limited to those "to be thereafter observed and in force." § 5(a). But the Commission maintains that it has the power to make findings as to the lawful-

[30] The Commission has been alert to the problems of conservation in its administration of the Act. It has indeed suggested that it might be wise to restrict the use of natural gas "by functions rather than by areas." Annual Report (1940) p. 79.

The Commission stated in that connection that natural gas was particularly adapted to certain industrial uses. But it added that the general use of such gas "under boilers for the production of steam" is "under most circumstances of very questionable social economy." *Ibid.*

ness of past rates even though it has no power to fix those rates.[31] However that may be, we do not think that these findings were reviewable under § 19(b) of the Act. That section gives any party "aggrieved by an order" of the Commission a review "of such order" in the circuit court of appeals for the circuit where the natural gas company is located or has its principal place of business or in the United States Court of Appeals for the District of Columbia. We do not think that the findings in question fall within that category.

The Court recently summarized the various types of administrative action or determination reviewable as orders under the Urgent Deficiencies Act of October 22, 1913, 28 U. S. C. §§ 45, 47a, and kindred statutory provisions. *Rochester Tel. Corp.* v. *United States*, 307 U. S. 125. It was there pointed out that where "the order sought to be reviewed does not of itself adversely affect complainant but only affects his rights adversely on the contingency of future administrative action", it is not reviewable. *Id.*, p. 130. The Court said, "In view of traditional conceptions of federal judicial power, resort to the courts in these situations is either premature or wholly beyond their province." *Id.*, p. 130. And see *United States* v. *Los Angeles & S. L. R. Co.*, 273 U. S. 299, 309, 310; *Shannahan* v. *United States*, 303 U. S. 596. These considerations are apposite here. The Commission has no authority to enforce these findings. They are "the exercise solely of the function of investigation." *United States* v. *Los Angeles & S. L. R. Co.*, *supra*, p. 310. They are only a preliminary, interim step towards possible future action—action not by the Commission but by wholly independent agencies. The outcome of those proceedings may turn on factors other than these findings. These findings may never result in the respondent feeling the pinch of administrative action.

*Reversed.*

Mr. Justice ROBERTS took no part in the consideration or decision of this case.

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[31] The argument is that § 4(a) makes "unlawful" the charging of any rate that is not just and reasonable. And § 14(a) gives the Commission power to investigate any matter "which it may find necessary or proper in order to determine whether any person has violated" any provision of the Act. Moreover, § 5(b) gives the Commission power to investigate and determine the cost of production or transportation of natural gas in cases where it has "no authority to establish a rate governing the transportation or sale of such natural gas." And § 17(c) directs the Commission "to make available to the several State commissions such information and reports as may be of assistance in State regulation of natural-gas companies." For a discussion of these points by the Commission see 44 P. U. R. (N. S.) pp. 34-35.

# SUPREME COURT OF THE UNITED STATES.

Nos. 34 and 35.—October Term, 1943.

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| Federal Power Commission, City of Akron and Pennsylvania Public Utility Commission, Petitioners, 34 *vs.* Hope Natural Gas Company. | On Writs of Certiorari to the United States Circuit Court of Appeals for the Fourth Circuit. |
| City of Cleveland, Petitioner, 35 *vs.* Hope Natural Gas Company. | |

[January 3, 1944.]

Opinion of Mr. Justice Black and Mr. Justice Murphy.

We agree with the Court's opinion and would add nothing to what has been said but for what is patently a wholly gratuitous assertion as to Constitutional law in the dissent of Mr. Justice Frankfurter. We refer to the statement that "Congressional acquiescence to date in the doctrine of *Chicago, etc., Railway Co.* v. *Minnesota, supra*, may fairly be claimed." That was the case in which a majority of this Court was finally induced to expand the meaning of "due process" so as to give courts power to block efforts of the state and national governments to regulate economic affairs. The present case does not afford a proper occasion to discuss the soundness of that doctrine because, as stated in Mr. Justice Frankfurter's dissent, "That issue is not here in controversy." The salutary practice whereby courts do not discuss issues in the abstract applies with peculiar force to Constitutional questions. Since, however, the dissent adverts to a highly controversial due process doctrine and implies its acceptance by Congress, we feel compelled to say that we do not understand that Congress voluntarily has acquiesced in a Constitutional principle of government that courts, rather than legislative bodies, possess final authority over regulation of economic affairs. Even this Court has not always fully embraced that principle, and we wish to repeat that we have never acquiesced in it, and do not now. See *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 599-601.

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[January 3, 1944.]

Mr. Justice Reed, dissenting.

This case involves the problem of rate making under the Natural Gas Act. Added importance arises from the obvious fact that the principles stated are generally applicable to all federal agencies which are entrusted with the determination of rates for utilities. Because my views differ somewhat from those of my brethren, it may be of some value to set them out in a summary form.

The Congress may fix utility rates in situations subject to federal control without regard to any standard except the constitutional standards of due process and for taking private property for public use without just compensation. *Wilson* v. *New*, 243 U. S. 332, 350. A Commission, however, does not have this freedom of action. Its powers are limited not only by the constitutional standards but also by the standards of the delegation. Here the standard added by the Natural Gas Act is that the rate be "just and reasonable."[1] Section 6[2] throws additional light on the meaning of these words.

[1] Natural Gas Act, § 4(a), 52 Stat. 821, 822, 15 U. S. C. § 717(a).

[2] 52 Stat. 821, 824, 15 U. S. C. § 717e:

"(a) The Commission may investigate and ascertain the actual legitimate cost of the property of every natural-gas company, the depreciation therein, and, when found necessary for rate-making purposes, other facts which bear

When the phrase was used by Congress to describe allowable rates, it had relation to something ascertainable. The rates were not left to the whim of the Commission. The rates fixed would produce an annual return and that annual return was to be compared with a theoretical just and reasonable return, all risks considered, on the fair value of the property used and useful in the public service at the time of the determination.

Such an abstract test is not precise. The agency charged with its determination has a wide range before it could properly be said by a court that the agency had disregarded statutory standards or had confiscated the property of the utility for public use. Cf. *Chicago, M. & St. P. Ry.* v. *Minnesota*, 134 U. S. 418, 461-66, dissent. This is as Congress intends. Rates are left to an experienced agency particularly competent by training to appraise the amount required.

The decision as to a reasonable return had not been a source of great difficulty, for borrowers and lenders reached such agreements daily in a multitude of situations; and although the determination of fair value had been troublesome, its essentials had been worked out in fairness to investor and consumer by the time of the enactment of this Act. Cf. *Los Angeles G. & E. Corp.* v. *Railroad Com.*, 289 U. S. 287, 304 *et seq.* The results were well known to Congress and had that body desired to depart from the traditional concepts of fair value and earnings, it would have stated its intention plainly. *Helvering* v. *Griffiths*, 318 U. S. 371.

It was already clear that when rates are in dispute, "earnings produced by rates do not afford a standard for decision." 289 U. S. at 305. Historical cost, prudent investment and reproduction cost[3] were all relevant factors in determining fair value. In-

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on the determination of such cost or depreciation and the fair value of such property.

"(b) Every natural-gas company upon request shall file with the Commission an inventory of all or any part of its property and a statement of the original cost thereof, and shall keep the Commission informed regarding the cost of all additions, betterments, extensions, and new construction."

[3] "Reproduction cost" has been variously defined, but for rate making purposes the most useful sense seems to be, the minimum amount necessary to create at the time of the inquiry a modern plant capable of rendering equivalent service. See I Bonbright, Valuation of Property (1937) 152. Reproduction cost as the cost of building a replica of an obsolescent plant is not of real significance.

"Prudent investment" is not defined by the Court. It may mean the sum originally put in the enterprise, either with or without additional amounts from excess earnings reinvested in the business.

deed, disregarding the pioneer investor's risk, if prudent investment and reproduction cost were not distorted by changes in price levels or technology, each of them would produce the same result. The realization from the risk of an investment in a speculative field, such as natural gas utilities, should be reflected in the present fair value.[4] amount of evidence to be admitted on any point was of course in the agency's reasonable discretion, and it was free to give its own weight to these or other factors and to determine from all the evidence its own judgment as to the necessary rates.

I agree with the Court in not imposing a rule of prudent investment alone in determining the rate base. This leaves the Commission free, as I understand it, to use any available evidence for its finding of fair value, including both prudent investment and the cost of installing at the present time an efficient system for furnishing the needed utility service.

My disagreement with the Court arises primarily from its view that it makes no difference how the Commission reached the rate fixed so long as the result is fair and reasonable. For me the statutory command to the Commission is more explicit. Entirely aside from the constitutional problem of whether the Congress could validly delegate its rate making power to the Commission, *in toto* and without standards, it did legislate in the light of the relation of fair and reasonable to fair value and reasonable return. The Commission must therefore make its findings in observance of that relationship.

The Federal Power Commission did not, as I construe their action, disregard its statutory duty. They heard the evidence relating to historical and reproduction cost and to the reasonable rate of return, and they appraised its weight. The evidence of reproduction cost was rejected as unpersuasive, but from the other evidence they found a rate base, which is to me a determination of fair value. On that base the earnings allowed seem fair and reasonable. So far as the Commission went in appraising the property employed in the service, I find nothing in the result

[4] It is of no more than bookkeeping significance whether the Commission allows a rate of return commensurate with the risk of the original investment or the lower rate based on current risk and a capitalization reflecting the established earning power of a successful company and the probable cost of duplicating its services. Cf. A. T. & T. v. United States, 299 U. S. 232. But the latter is the traditional method.

which indicates confiscation, unfairness or unreasonableness. Good administration of rate making agencies under this method would avoid undue delay and render revaluations unnecessary except after violent fluctuations of price levels. Rate making under this method has been subjected to criticism. But until Congress changes the standards for the agencies, these rate making bodies should continue the conventional theory of rate making. It will probably be simpler to improve present methods than to devise new ones.

But a major error, I think, was committed in the disregard by the Commission of the investment in exploratory operations and other recognized capital costs. These were not considered by the Commission because they were charged to operating expenses by the company at a time when it was unregulated. Congress did not direct the Commission in rate making to deduct from the rate base capital investment which had been recovered during the unregulated period through excess earnings. In my view this part of the investment should no more have been disregarded in the rate base than any other capital investment which previously had been recovered and paid out in dividends or placed to surplus. Even if prudent investment throughout the life of the property is accepted as the formula for figuring the rate base, it seems to me illogical to throw out the admittedly prudent cost of part of the property because the earnings in the unregulated period had been sufficient to return the prudent cost to the investors over and above a reasonable return. What would the answer be under the theory of the Commission and the Court, if the only prudent investment in this utility had been the seventeen million capital charges which are now disallowed?

For the reasons heretofore stated, I should affirm the action of the Circuit Court of Appeals in returning the proceeding to the Commission for further consideration and should direct the Commission to accept the disallowed capital investment in determining the fair value for rate making purposes.

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[January 3, 1944.]

Mr. Justice Frankfurter, dissenting.

My brother Jackson has analyzed with particularity the economic and social aspects of natural gas as well as the difficulties which led to the enactment of the Natural Gas Act, especially those arising out of the abortive attempts of States to regulate natural gas utilities. The Natural Gas Act of 1938 should receive application in the light of this analysis, and Mr. Justice Jackson has, I believe, drawn relevant inferences regarding the duty of the Federal Power Commission in fixing natural gas rates. His exposition seems to me unanswered, and I shall say only a few words to emphasize my basic agreement with him.

For our society the needs that are met by public utilities are as truly public services as the traditional governmental functions of police and justice. They are not less so when these services are rendered by private enterprise under governmental regulation. Who ultimately determines the ways of regulation, is the decisive aspect in the public supervision of privately-owned utilities. Foreshadowed nearly sixty years ago, *Railroad Commission Cases*, 116 U. S. 307, 331, it was decided more than fifty years ago that the final say under the Constitution lies with the judiciary and not the legislature. *Chicago etc. Railway Co.* v. *Minnesota*, 134 U. S. 418.

While legal issues touching the proper distribution of governmental powers under the Constitution may always be raised, Congressional acquiescence to date in the doctrine of *Chicago etc. Railway Co.* v. *Minnesota, supra,* may fairly be claimed. But in any event that issue is not here in controversy. As pointed out in the opinions of my brethren, Congress has given only limited authority to the Federal Power Commission and made the exercise of that authority subject to judicial review. The Commission is authorized to fix rates chargeable for natural gas. But the rates that it can fix must be "just and reasonable". § 5 of the Natural Gas Act, 15 U. S. C. § 717(d). Instead of making the Commission's rate determinations final, Congress specifically provided for court review of such orders. To be sure, "the finding of the Commission as to the facts, if supported by substantial evidence" was made "conclusive"; § 19 of the Act, 15 U. S. C. § 717r. But obedience of the requirement of Congress that rates be "just and reasonable" is not an issue of fact of which the Commission's own determination is conclusive. Otherwise, there would be nothing for a court to review except questions of compliance with the procedural provisions of the Natural Gas Act. Congress might have seen fit so to cast its legislation. But it has not done so. It has committed to the administration of the Federal Power Commission the duty of applying standards of fair dealing and of reasonableness relevant to the purposes expressed by the Natural Gas Act. The requirement that rates must be "just and reasonable" means just and reasonable in relation to appropriate standards. Otherwise Congress would have directed the Commission to fix such rates as in the judgment of the Commission are just and reasonable; it would not have also provided that such determinations by the Commission are subject to court review.

To what sources then are the Commission and the courts to go for ascertaining the standards relevant to the regulation of natural gas rates? It is at this point that Mr. Justice JACKSON's analysis seems to me pertinent. There appear to be two alternatives. Either the fixing of natural gas rates must be left to the unguided discretion of the Commission so long as the rates it fixes do not reveal a glaringly bad prophecy of the ability of a regulated utility to continue its service in the future. Or the Commission's rate orders must be founded on due consideration of all

the elements of the public interest which the production and distribution of natural gas involve just because it is natural gas. These elements are reflected in the Natural Gas Act, if that Act be applied as an entirety. See, for instance, §§ 4(a)(b)(c)(d), 6, and 11, 15 U. S. C. § 717c (a)(b)(c)(d), 717e, and 717j. Of course the statute is not concerned with abstract theories of rate-making. But its very foundation is the "public interest", and the public interest is a texture of multiple strands. It includes more than contemporary investors and contemporary consumers. The needs to be served are not restricted to immediacy, and social as well as economic costs must be counted.

It will not do to say that it must all be left to the skill of experts. Expertise is a rational process and a rational process implies ~~articulation of~~ expressed reasons for judgment. It will little advance the public interest to substitute for the hodge-podge of the rule in *Smyth* v. *Ames*, 169 U. S. 466, an encouragement of conscious obscurity or confusion in reaching a result, on the assumption that so long as the result appears harmless its basis is irrelevant. That may be an appropriate attitude when state action is challenged as unconstitutional. Cf. *Driscoll* v. *Edison Co.*, 307 U. S. 104. But it is not to be assumed that it was the design of Congress to make the accommodation of the conflicting interests exposed in Mr. Justice JACKSON's opinion the occasion for a blind clash of forces or a partial assessment of relevant factors, either before the Commission or here.

The objection to the Commission's action is not that the rates it granted were too low but that the range of its vision was too narrow. And since the issues before the Commission involved no less than the total public interest, the proceedings before it should not be judged by narrow conceptions of common law pleading. And so I conclude that the case should be returned to the Commission. In order to enable this Court to discharge its duty of reviewing the Commission's order, the Commission should set forth with explicitness the criteria by which it is guided in determining that rates are "just and reasonable", and it should determine the public interest that is in its keeping in the perspective of the considerations set forth by Mr. Justice JACKSON.

# SUPREME COURT OF THE UNITED STATES.

Nos. 34, 35.—October Term, 1943.

Federal Power Commission, City of Akron and Pennsylvania Public Utility Commission, Petitioners,
34 *vs.*
Hope Natural Gas Company.

City of Cleveland, Petitioner,
35 *vs.*
Hope Natural Gas Company.

On Writs of Certiorari to the United States Circuit Court of Appeals for the Fourth Circuit.

[January 3, 1944.]

By Mr. Justice Jackson.

Certainly the theory of the court below that ties rate-making to the fair-value-reproduction-cost formula should be overruled as in conflict with *Federal Power Commission* v. *Natural Gas Pipeline Co.*[1] But the case should, I think, be the occasion for reconsideration of our rate-making doctrine as applied to natural gas and should be returned to the Commission for further consideration in the light thereof.

The Commission appears to have understood the effect of the two opinions in the *Pipeline* case to be at least authority and perhaps direction to fix natural gas rates by exclusive application of the "prudent investment" rate base theory. This has no warrant in the opinion of the Chief Justice for the Court, however, which released the Commission from subservience to "any single formula or combination of formulas" provided its order, "viewed in its entirety, produces no arbitrary result." 315 U. S. at 586. The minority opinion I understood to advocate the "prudent investment" theory as a sufficient guide in a natural gas case. The view was expressed in the court below that since this opinion was not expressly controverted it must have been approved.[2] I dis-

1 315 U. S. 575.

2 Judge Dobie, dissenting below, pointed out that the majority opinion in the *Pipeline* case "contains no express discussion of the Prudent Investment Theory" and that the concurring opinion contained a clear one, and said, "It

claim this imputed approval with some particularity, because I attach importance at the very beginning of federal regulation of the natural gas industry to approaching it as the performance of economic functions, not as the performance of legalistic rituals.

## I.

Solutions of these cases must consider eccentricities of the industry which gives rise to them and also to the Act of Congress by which they are governed.

The heart of this problem is the elusive, exhaustible, and irreplaceable nature of natural gas itself. Given sufficient money, we can produce any desired amount of railroad, bus, or steamship transportation, or communications facilities, or capacity for generation of electric energy, or for the manufacture of gas of a kind. In the service of such utilities one customer has little concern with the amount taken by another, one's waste will not deprive another, a volume of service can be created equal to demand, and today's demands will not exhaust or lessen capacity to serve tomorrow. But the wealth of Midas and the wit of man cannot produce or reproduce a natural gas field. We cannot even reproduce the gas, for our manufactured product has only about half the heating value per unit of nature's own.[3]

Natural gas in some quantity is produced in twenty-four states. It is consumed in only thirty-five states, and is available only to about 7,600,000 consumers.[4] Its availability has been more localized than that of any other utility service becauase it has depended more on the caprice of nature.

The supply of the Hope Company is drawn from that old and rich and vanishing field that flanks the Appalachian mountains. Its center of production is Pennsylvania and West Virginia, with a fringe of lesser production in New York, Ohio, Kentucky, Ten-

is difficult for me to believe that the majority of the Supreme Court, believing otherwise, would leave such a statement unchallenged." The fact that two other Justices had as matter of record in our books long opposed the reproduction cost theory of rate bases and had commented favorably on the prudent investment theory may have influenced that conclusion. See opinion of Mr. Justice Frankfurter in Driscoll v. Edison Light & Power Co., 307 U. S. 104, 122, and my brief as Solicitor General in that case. It should be noted, however, that these statements were made, not in a natural gas case, but in an electric power case—a very important distinction, as I shall try to make plain.

[3] Natural gas from the Appalachian field averages about 1050 to 1150 B.T.U. content, while by-product manufactured gas is about 530 to 540. Moody's Manual of Public Utilities (1943) 1350; Youngberg, Natural Gas (1930) 7.

[4] Sen. Rep. No. 1162, 75th Cong., 1st Sess., 2.

nessee, and the north end of Alabama. Oil was discovered in commercial quantities at a depth of only 69½ feet near Titusville, Pennsylvania, in 1859. Its value then was about $16 per barrel.[5] The oil branch of the petroleum industry went forward at once, and with unprecedented speed. The area productive of oil and gas was roughed out by the drilling of over 19,000 "wildcat" wells, estimated to have cost over $222,000,000. Of these, over 18,000, or 94.9 per cent, were "dry holes." About five per cent, or 990 wells, made discoveries of commercial importance, 767 of them resulting chiefly in oil and [redacted] in gas only.[6] Prospecting for many years was a search for oil, and to strike gas was a misfortune. Waste during this period and even later is appalling. Gas was regarded as having no commercial value until about 1882, in which year the total yield was valued only at about $75,000.[7] Since then, contrary to oil, which has become cheaper, gas in this field has pretty steadily advanced in price.

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While for many years natural gas had been distributed on a small scale for lighting,[8] its acceptance was slow, facilities for its utilization were primitive, and not until 1885 did it take on the appearance of a substantial industry.[9] Soon monopoly of production or markets developed.[10] To get gas from the mountain country, where it was largely found, to centers of population, where it was in demand, required very large investment. By ownership of such facilities a few corporate systems, each including several companies, controlled access to markets. Their purchases became the dominating factor in giving a market value to gas produced by many small operators. Hope is the market for over 300 such operators. By 1928 natural gas in the Appalachian field

[5] Arnold and Kemnitzer, Petroleum in the United States and Possessions (1931) 78.

[6] *Id.* at 62-63.

[7] *Id.* at 61.

[8] At Fredonia, New York, in 1821, natural gas was conveyed from a shallow well to some thirty people. The lighthouse at Barcelona Harbor, near what is now Westfield, New York, was at about that time and for many years afterward lighted by gas that issued from a crevice. Report on Utility Corporations by Federal Trade Commission, Sen. Doc. 92, Pt. 84-A, 70th Cong., 1st Sess., 8-9.

[9] In that year Pennsylvania enacted "An Act to provide for the incorporation and regulation of natural gas companies." Penn. Laws 1885, No. 32.

[10] See Steptoe and Hoffheimer's Memorandum for Governor Cornwell of West Virginia (1917) 25 West Virginia Law Quarterly 257; see also Report on Utility Corporations by Federal Trade Commission, Sen. Doc. No. 92, Pt. 84-A, 70th Cong., 1st Sess.

commanded an average price of 21.1 cents per m.c.f. at points of production and was bringing 45.7 cents at points of consumption.[11] The companies which controlled markets, however, did not rely on gas purchases alone. They acquired and held in fee or leasehold great acreage in territory proved by "wildcat" drilling. These large marketing system companies as well as many small independent owners and operators have carried on the commercial development of proved territory. The development risks appear from the estimate that up to 1928, 312,318 proved area wells had been sunk in the Appalachian field of which 48,962, or 15.7 per cent, failed to produce oil or gas in commercial quantity.[12]

With the source of supply thus tapped to serve centers of large demand, like Pittsburgh, Buffalo, Cleveland, Youngstown, Akron, and other industrial communities, the distribution of natural gas fast became big business. Its advantages as a fuel and its price commended it, and the business yielded a handsome return. All was merry and the goose hung high for consumers and gas companies alike until about the time of the first World War. Almost unnoticed by the consuming public, the whole Appalachian field passed its peak of production and started to decline. Pennsylvania, which to 1928 had given off about 38 per cent of the natural gas from this field, had its peak in 1905; Ohio, which had produced 14 per cent, had its peak in 1915; and West Virginia, greatest producer of all, with 45 per cent to its credit, reached its peak in 1917.[13]

Western New York and Eastern Ohio, on the fringe of the field, had some production but relied heavily on imports from Pennsylvania and West Virginia. Pennsylvania, a producing and exporting state, was a heavy consumer and supplemented her production with imports from West Virginia. West Virginia was a consuming state, but the lion's share of her production was exported. Thus the interest of the states in the North Appalachian supply was in conflict.

Competition among localities to share in the failing supply and the helplessness of state and local authorities in the presence of state lines and corporate complexities is a part of the

[11] Arnold and Kemnitzer, Petroleum in the United States and Possessions (1931) 75.

[12] *Id.* at 63.

[13] *Id.* at 64.

background of federal intervention in the industry.[14] West Virginia took the boldest measure. It legislated a priority in its entire production in favor of its own inhabitants. That was frustrated by an injunction from this Court.[15] Throughout the region clashes in the courts and conflicting decisions evidenced public anxiety and confusion. It was held that the New York Public Service Commission did not have power to classify consumers and restrict their use of gas.[16] That Commission held that a company could not abandon a part of its territory and still serve the rest.[17] Some courts admonished the companies to take action to protect consumers.[18] Several courts held that companies, regardless of failing supply, must continue to take on customers, but such compulsory additions were finally held to be within the Public Service Commission's discretion.[19] There were attempts to throw up franchises and quit the service, and municipalities resorted to the courts with conflicting results.[20] Public service commissions of consuming states were handicapped, for they had no control of the supply.[21]

Shortages during World War I occasioned the first intervention in the natural gas industry by the Federal Government. Under Proclamation of President Wilson the United States Fuel Admin-

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[14] See Report on Utility Corporations by Federal Trade Commission, Sen. Doc. No. 92, Pt. 84-A, 70th Cong., 1st Sess.

[15] Pennsylvania *v.* West Virginia, 262 U. S. 553. For conditions there which provoked this legislation, see 25 West Virginia Law Quarterly 257.

[16] People *ex rel.* Pavilion Gas Co. *v.* Public Service Commission, 188 App. Div. 36, 176 N. Y. S. 163.

[17] Village of Falconer *v.* Pennsylvania Gas Company, 17 State Department Reports (N. Y.) 407.

[18] See, for example, Public Service Commission *v.* Iroquois Natural Gas Co., 108 Misc. 696, 178 N. Y. S. 24; Park Abbott Realty Co. *v.* Iroquois Gas Co., 102 Misc. 266, 168 N. Y. S. 673; Public Service Commission *v.* Iroquois Natural Gas Co., 189 App. Div. 545, 179 N. Y. S. 230.

[19] People *ex rel.* Pennsylvania Gas Co. v. Public Service Commission, 196 App. Div. 514, 189 N. Y. S. 478.

[20] East Ohio Gas Co. *v.* Akron, 81 Ohio St. 33, 90 N. E. 40; Newcomerstown *v.* Consolidated Gas Co., 100 Ohio St. 494, 127 N. E. 414; Grans *v.* Village of Ft. Laramie, 100 Ohio St. 35, 125 N. E. 112; Jamestown *v.* Pennsylvania Gas Co., 263 Fed. 437, 264 Fed. 1009. See also United Fuel Gas Co. *v.* Railroad Commission, 278 U. S. 300, 308.

[21] The New York Public Service Commission said: "While the transportation of natural gas through pipe lines from one state to another state is interstate commerce . . . , Congress has not taken over the regulation of that particular industry. Indeed, it has expressly excepted it from the operation of the Interstate Commerce Commissions Law (Interstate Commerce Commissions Law, section 1). It is quite clear, therefore, that this Commission

istrator took control, stopped extensions, classified consumers and established a priority for domestic over industrial use.[22] After the war federal control was abandoned. Some cities once served with natural gas became dependent upon a mixed gas of reduced heating value and relatively higher price.[23]

Utilization of natural gas of highest social as well as economic return is domestic use for cooking and water heating, followed closely by use for space heating in homes. This is the true public utility aspect of the enterprise, and its preservation should be the first concern of regulation. Gas does the family cooking cheaper than any other fuel.[24] But its advantages do not end with dollars and cents cost. It is delivered without interruption at the meter as needed and is paid for after it is used. No money is tied up in a supply, and no space is used for storage. It requires no handling, creates no dust, and leaves no ash. It responds to thermostatic control. It ignites easily and immeddiately develops its maximum heating capacity. These incidental advantages make domestic life more liveable.

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can not require a Pennsylvania corporation producing gas in Pennsylvania to transport it and deliver it in the State of New York, and that the Interstate Commerce Commission is likewise powerless. If there exists such a power, and it seems that there does, it is a power vested in Congress and by it not yet exercised. There is no available source of supply for the Crystal City Company at present except through purchasing from the Potter Gas Company. It is possible that this Commission might fix a price at which the Potter Gas Company should sell if it sold at all, but as the Commission can not require it to supply gas in the State of New York, the exercise of such a power to fix the price, if such power exists, would merely say, sell at this price or keep out of the State." Lane *v.* Crystal City Gas Co., 8 New York Public Service Comm. Reports, Second District, 210, 212.

[22] Proclamation by the President of September 16, 1918; Rules and Regulations of H. A. Garfield, Fuel Administrator, September 24, 1918.

[23] For example, the Iroquois Gas Corporation which formerly served Buffalo, New York, with natural gas ranging from 1050 to 1150 b.t.u. per cu. ft., now mixes a by-product gas of between 530 and 540 b.t.u. in proportions to provide a mixed gas of about 900 b.t.u. per cu. ft. For space heating or water heating its charges range from 65 cents for the first 10 m.c.f. per month to 55 cents for all above 25 m.c.f. per month. Moody's Manual of Public Utilities (1943) 1350.

[24] The United States Fuel Administration made the following cooking value comparisons, based on tests made in the Department of Home Economics of Ohio State University:

Natural gas at 1.12 per M. is equivalent to coal at $6.50 per ton.
Natural gas at 2.00 per M. is equivalent to gasoline at 27¢ per gal.
Natural gas at 2.20 per M. is equivalent to electricity at 3¢ per k.w.h.
Natural gas at 2.40 per M. is equivalent to coal oil at 15¢ per gal.

Use and Conservation of Natural Gas, issued by U. S. Fuel Administration (1918) 5.

Industrial use is induced less by these qualities than by low cost in competition with other fuels. Of the gas exported from West Virginia by the Hope Company a very substantial part is used by industries. This wholesale use speeds exhaustion of supply and displaces other fuels. Coal miners and the coal industry, a large part of whose costs are wages, have complained of unfair competition from low-priced industrial gas produced with relatively little labor cost.[25]

Gas rate structures generally have favored industrial users. In 1932, in Ohio, the average yield on gas for domestic consumption was 62.1 cents per m.c.f. and on industrial, 38.7 In Pennsylvania, the figures were 62.9 against 31.7. West Virginia showed the least spread, domestic consumers paying 36.6 cents; and industrial, 27.7.[26] Although this spread is less than in other parts of the United States,[27] it can hardly be said to be self-justifying. It certainly is a very great factor in hastening decline of the natural gas supply.

About the time of World War I there were occasional and short-lived efforts by some hard-pressed companies to reverse this discrimination and adopt graduated rates, giving a low rate to quantities adequate for domestic use and graduating it upward to discourage industrial use.[28] These rates met opposition from industrial sources, of course, and since diminished revenues from industrial sources tended to increase the domestic price, they met little popular or commission favor. The fact is that neither the gas companies nor the consumers nor local regulatory bodies can be depended upon to conserve gas. Unless federal regulation will

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[25] See Brief on Behalf of Legislation Imposing an Excise Tax on Natural Gas, submitted to N. R. A. by the United Mine Workers of America and the National Coal Association.

[26] Brief of National Gas Association and United Mine Workers, *supra* note 26, pp. 35, 36, compiled from Bureau of Mines Reports.

[27] From the source quoted in the preceding note the spread elsewhere is shown to be:

| *State* | *Industrial* | *Domestic* |
|---|---|---|
| Illinois | 29.2 | 1.678 |
| Louisiana | 10.4 | 59.7 |
| Oklahoma | 11.2 | 41.5 |
| Texas | 13.1 | 59.7 |
| Alabama | 17.8 | 1.227 |
| Georgia | 22.9 | 1.043 |

[28] In Corning, New York, rates were initiated by the Crystal City Gas Company as follows: 70¢ for the first 5,000 cu. ft. per month; 80¢ from 5,000 to 12,000; $1.00 for all over 12,000. The Public Service Commission rejected

take account of conservation, its efforts seem, as in this case, actually to constitute a new threat to the life of the Appalachian supply.

## II.

Congress in 1938 decided upon federal regulation of the industry. It did so after an exhaustive investigation of all aspects including failing supply and competition for the use of natural gas intensified by growing scarcity.[29] Pipelines from the Appalachian area to markets were in the control of a handful of holding company systems.[30] This created a highly concentrated control of the producers' market and of the consumers' supplies. While holding companies dominated both production and distribution they segregated those activities in separate subsidiaries,[31] the effect of which, if not the purpose, was to isolate some end of the business from the reach of any one state commission. The cost of natural

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these rates and fixed a flat rate of 58¢ per m.c.f. Lane *v.* Crystal City Gas Co., 8 New York Public Service Comm. Reports, Second District, 210.

The Pennsylvania Gas Company (National Fuel Gas Company group) also attempted a sliding scale rate for New York consumers, net per month as follows: First 5,000 feet, 35¢; second 5,000 feet, 45¢; third 5,000 feet, 50¢; all above 15,000, 55¢. This was eventually abandoned, however. The company's present scale in Pennsylvania appears to be reversed to the following net monthly rate: first 3 m.c.f., 75¢; next 4 m.c.f., 60¢; next 8 m.c.f., 55¢; over 15 m.c.f., 50¢. Moody's Manual of Public Utilities (1943) 1350. In New York it now serves a mixed gas.

For a study of effect of sliding scale rates in reducing consumption see 11 Proceedings of Natural Gas Association of America (1919) 287.

[29] See Report on Utility Corporations by Federal Trade Commission, Sen. Doc. 92, Pt. 84-A, 70th Cong., 1st Sess.

[30] Four holding company systems control over 55 per cent of all natural gas transmission lines in the United States. They are Columbia Gas and Electric Corporation, Cities Service Co., Electric Bond and Share Co., and Standard Oil Co. of New Jersey. Columbia alone controls nearly 25 per cent, and fifteen companies account for over 80 per cent of the total. Report on Utility Corporations by Federal Trade Commission, Sen Doc. 92, Pt. 84-A, 70th Cong., 1st Sess., 28.

In 1915, so it was reported to the Governor of West Virginia, 87 per cent of the total gas production of that state was under control of eight companies. Steptoe and Hoffheimer, Legislative Regulation of Natural Gas Supply in West Virginia, 17 West Virginia Law Quarterly 257, 260. Of these, three were subsidiaries of the Columbia system and others were subsidiaries of larger systems. In view of inter-system sales and interlocking interests it may be doubted whether there is much real competition among these companies.

[31] This pattern with its effects on local regulatory efforts will be observed in our decisions. See United Fuel Gas Co. *v.* Railroad Commission, 278 U. S. 300; United Fuel Gas Co. *v.* Public Service Commission, 278 U. S. 322; Dayton Power & Light *v.* Public Utilities Commission, 292 U. S. 290; Columbus Gas & Fuel Co. *v.* Public Utilities Commission, 292 U. S. 398, and the present case.

gas to consumers moved steadily upwards over the years, out of proportion to prices of oil, which, except for the element of competition, is produced under somewhat comparable conditions. The public came to feel that the companies were exploiting the growing scarcity of local gas. The problems of this region had much to do with creating the demand for federal regulation.

The Natural Gas Act declared the natural gas business to be "affected with a *public interest,*" and its regulation "necessary in the *public interest.*"[32] Originally, and at the time this proceeding was commenced and tried, it also declared "the intention of Congress that natural gas shall be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial or any other use at the lowest possible reasonable rate *consistent with the maintenance of adequate service in the public interest.*"[33] While this was later dropped, there is nothing to indicate that it was not and is not still an accurate statement of purpose of the Act. Extension or improvement of facilities may be ordered when "necessary or desirable in the public interest," abandonment of facilities may be ordered when the supply is "depleted to the extent that the continuance of service is unwarranted, or that the *present or future public convenience or necessity* permit" abandonment and certain extensions can only be made on finding of "the *present or future* convenience and necessity."[34] The Commission is required to take account of the ultimate use of the gas. Thus it is given power to suspend new schedules as to rates, charges, and classification of services except where the schedules are for the sale of gas "for resale for industrial use only,"[35] which gives the companies greater freedom to increase rates on industrial gas than on domestic gas. More particularly, the Act expressly forbids any undue preference or advantage to any person or "*any unreasonable difference in rates* . . . either as between localities *or as between classes of service.*"[36] And the power of the Commission expressly includes that to determine the "just and reasonable *rate, charge, classification, rule, regulation, practice or contract* to be thereafter observed and in force."[37]

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[32] 15 U. S. C. § 717(a). (Italics supplied throughout this paragraph.)
[33] § 7(e), 52 Stat. 825.
[34] 15 U. S. C. § 717f.
[35] *Id.*, § 717c(e).
[36] *Id.*, § 717c(b).
[37] *Id.*, § 717d(a).

In view of the Court's opinion that the Commission in administering the Act may ignore discrimination, it is interesting that in reporting this Bill both the Senate and the House Committees on Interstate Commerce pointed out that in 1934, on a nation-wide average the price of natural gas per m.c.f. was 74.6 cents for domestic use, 49.6 cents for commercial use, and 16.9 for industrial use.[38] I am not ready to think that supporters of a bill called attention to the striking fact that householders were being charged five times as much for their gas as industrial users only as a situation which the Bill would do nothing to remedy. On the other hand the Act gave to the Commission what the Court aptly describes as "broad powers of regulation."

III.

This proceeding was initiated by the Cities of Cleveland and Akron. They alleged that the price charged by Hope for natural gas "for resale to domestic, commercial and small industrial consumers in Cleveland and elsewhere is excessive, unjust, unreasonable, greatly in excess of the price charged by Hope to nonaffiliated companies at wholesale for resale to domestic, commercial and small industrial consumers, and *greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio, and therefore is further unduly discriminatory between consumers and between classes of service*" [italics supplied]. The company answered admitting differences in prices to affiliated and nonaffiliated companies and justifying them by differences in conditions of delivery. As to the allegation that the contract price is "greatly in excess of the price charged by Hope to East Ohio for resale to certain favored industrial consumers in Ohio," Hope did not deny a price differential, but alleged that industrial gas was not sold to "favored consumers" but was sold under contracts and schedules filed with and approved by the Public Utilities Commission of Ohio, and that certain conditions of delivery made it not "unduly discriminatory."

The record shows that in 1940 Hope delivered for industrial consumption 36,523,792 m.c.f. and for domestic and commercial consumption, 50,343,652 m.c.f. I find no separate figure for domestic consumption. It served 43,767 domestic consumers directly, 511,521 through the East Ohio Gas Company, and 154,043

[38] Sen. Rep. No. 1162, 75th Cong., 1st Sess. 2.

through the Peoples Natural Gas Company, both affiliates owned by the same parent. Its special contracts for industrial consumption, so far as appear, are confined to about a dozen big industries.

Hope is responsible for such discrimination as exists in favor of these few industrial consumers. It controls both the resale price and use of industrial gas by virtue of the very interstate sales contracts over which the Commission is exercising its jurisdiction.

Hope's contract with East Ohio Company is an example. Hope agrees to deliver, and the Ohio Company to take, "(a) all natural gas requisite for the supply of the domestic consumers of the Ohio Company; (b) such amounts of natural gas as may be requisite to fulfill contracts made with the consent and approval of the Hope Company by the Ohio Company, or companies which it supplies with natural gas, for the sale of gas upon special terms and conditions for manufacturing purposes." The Ohio company is required to read domestic customers' meters once a month and meters of industrial customers daily and to furnish all meter readings to Hope. The Hope Company is to have access to meters of all consumers and to all of the Ohio Company's accounts. The domestic consumers of the Ohio Company are to be fully supplied in preference to consumers purchasing for manufacturing purposes and "Hope Company can be required to supply gas to be used for manufacturing purposes only where the same is sold under special contracts which have first been submitted to and approved in writing by the Hope Company and which expressly provide that natural gas will be supplied thereunder only in so far as the same is not necessary to meet the requirements of domestic consumers supplied through pipe lines of the Ohio Company." This basic contract was supplemented from time to time, chiefly as to price. The last amendment was in a letter from Hope to East Ohio in 1937. It contained a special discount on industrial gas and a schedule of special industrial contracts, Hope reserving the right to make eliminations therefrom and agreeing that others might be added from time to time with its approval in writing. It said, "It is believed that the price concessions contained in this letter, *while not based on our costs*, are, under certain conditions, to our mutual advantage in main-

taining and building up the volumes of gas sold by us [italics supplied]."[39]

The Commission took no note of the charges of discrimination and made no disposition of the issue tendered on this point. It ordered a flat reduction in the price per m.c.f. of all gas delivered by Hope in interstate commerce. It made no limitation, condition, or provision as to what classes of consumers should get the benefit of the reduction. While the cities have accepted and are defending the reduction, it is my view that the discrimination of which they have complained is perpetuated and increased by the order of the Commission and that it violates the Act in so doing.

The Commission's opinion aptly characterizes its entire objective by saying that "bona fide investment figures now become all-important in the regulation of rates." It should be noted that the all-importance of this theory is not the result of any instruction from Congress. When the Bill to regulate gas was first before Congress it contained the following: "In determining just and reasonable rates the Commission shall fix such rate as will allow a fair return upon the actual legitimate prudent cost of the property used and useful for the service in question." H. R. 5423, 74th Cong., 1st Sess. Title III, § 312(e). Congress rejected this language. See H. R. 5423, § 213[211(e)], and H. R. Rep. No. 1318, 74th Cong., 1st Sess. 30.

The Commission contends nevertheless that the "all important" formula for finding a rate base is that of prudent investment. But it excluded from the investment base an amount actually and admittedly invested of some $17,000,000. It did so be-

[39] The list of East Ohio Gas Company's special industrial contracts thus expressly under Hope's control and their demands are as follows:

| *Customer* | *Ordinary Daily Requirements.* |
|---|---|
| Republic Steel Corporation | 15,000,000 cu. ft. |
| Otis Steel Company | 10,000,000 |
| Timken Roller Bearing Co. | 7,500,000 |
| Youngstown Sheet & Tube Co. | 7,000,000 |
| U. S. Steel Corp.—Subsidiaries | 6,500,000 |
| General Electric Company | 2,500,000 |
| Pittsburgh Plate Glass Co. | 2,000,000 |
| Niles Rolling Mill Company | 1,500,000 |
| Chase Brass & Copper Company | 700,000 |
| U. S. Aluminum Company | 400,000 |
| Mahoning Valley Steel Company | 400,000 |
| Babcock & Wilcox Company | 400,000 |
| Canton Stamping & Enameling Co. | 350,000 |

cause it says that the Company recouped these expenditures from customers before the days of regulation from earnings above a fair return. But it would not apply all of such "excess earnings" to reduce the rate base as one of the Commissioners suggested. The reason for applying excess earnings to reduce the investment base roughly from $69,000,000 to $52,000,000 but refusing to apply them to reduce it from that to some $18,000,000 is not found in a difference in the character of the earnings or in their reinvestment. The reason assigned is a difference in bookkeeping treatment many years before the Company was subject to regulation. The $17,000,000, reinvested chiefly in well drilling, was treated on the books as expense. (The Commission now requires that drilling costs be carried to capital account.) The allowed rate base thus actually was determined by the Company's bookkeeping, not its investment. This attributes a significance to formal classification in account keeping that seems inconsistent with rational rate regulation.[40] Of course, the Commission would not and should not allow a rate base to be inflated by bookkeeping which had improperly capitalized expenses. I have doubts about resting public regulation upon any rule that is to be used or not depending on which side it favors.

The Company on the other hand, has not put its gas fields into its calculations on the present-value basis, although that, it contends, is the only lawful rule for finding a rate base. To do so would result in a rate higher than it has charged or proposes as a matter of good business to charge.

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[40] To make a fetish of mere accounting is to shield from examination the deeper causes, forces, movements, and conditions which should govern rates. Even as a recording of current transactions, bookkeeping is hardly an exact science. As a representation of the condition and trend of a business, it uses symbols of certainty to express values that actually are in constant flux. It may be said that in commercial or investment banking or any business extending credit success depends on knowing what not to believe in accounting. Few concerns go into bankruptcy or reorganization whose books do not show them solvent and often even profitable. If one cannot rely on accountancy accurately to disclose past or current conditions of a business, the fallacy of using it as a sole guide to future price policy ought to be apparent. However, our quest for certitude is so ardent that we pay an irrational reverence to a technique which uses symbols of certainty, even though experience again and again warns us that they are delusive. Few writers have ventured to challenge this American idolatry, but see Hamilton, Cost as a Standard for Price, 4 Law and Contemporary Problems 321, 323-25. He observes that "As the apostle would put it, accountancy is all things to all men, . . . Its purpose determines the character of a system of accounts." He analyzes the hypothetical character of accounting and says "It was no eternal mold for pecuniary verities handed down from on high. It was—like logic or al-

The case before us demonstrates the lack of rational relationship between conventional rate-base formulas and natural gas production and the extremities to which regulating bodies are brought by the effort to rationalize them. The Commission and the Company each stands on a different theory, and neither ventures to carry its theory to logical conclusion as applied to gas fields.

IV.

This order is under judicial review not because we interpose constitutional theories between a State and the business it seeks to regulate, but because Congress put upon the federal courts a duty toward administration of a new federal regulatory Act. If we are to hold that a given rate is reasonable just because the Commission has said it was reasonable, review becomes a costly, time-consuming pageant of no practical value to anyone. If on the other hand we are to bring judgment of our own to the task, we should for the guidance of the regulators and the regulated reveal something of the philosophy, be it legal or economic or social, which guides us. We need not be slaves to a formula but unless we can point out a rational way of reaching our conclusions they can only be accepted as resting on intuition or predilection. I must admit that I possess no instinct by which to know the "reasonable" from the "unreasonable" in prices and must seek some conscious design for decision.

The Court sustains this order as reasonable, but what makes it so or what could possibly make it otherwise, I cannot learn. It holds that: "it is the result reached not the method employed which is controlling"; "the fact that the method employed to reach that result may contain infirmities is not then important" and it

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gebra, or the device of analogy in the law—an ingenious contrivance of the human mind to serve a limited and practical purpose." "Accountancy is far from being a pecuniary expression of all that is industrial reality. It is an instrument, highly selective in its application, in the service of the institution of money making." As to capital account he observes "In an enterprise in lusty competition with others of its kind, survival is the thing and the system of accounts has its focus in solvency. . . . Accordingly depreciation, obsolescence, and other factors which carry no immediate threat are matters of lesser concern and the capital account is likely to be regarded as a secondary phenomenon. . . . But in an enterprise, such as a public utility, where continued survival seems assured, solvency is likely to be taken for granted. . . . A persistent and ingenious attention is likely to be directed not so much to securing the upkeep of the physical property as to making it certain that capitalization fails in not one whit to give full recognition to every item that should go into the account."

is not "important to this case to determine the various permissible ways in which any rate base on which the return is computed might be arrived at." The Court does lean somewhat on considerations of capitalization and dividend history and requirements for dividends on outstanding stock. But I can give no real weight to that for it is generally and I think deservedly in discredit as any guide in rate cases.[41]

Our books already contain so much talk of methods of rationalizing rates that we must appear ambiguous if we announce results without our working methods. We are confronted with regulation of a unique type of enterprise which I think requires considered rejection of much conventional utility doctrine and adoption of concepts of "just and reasonable" rates and practices and of the "public interest" that will take account of the peculiarities of the business.

The Court rejects the suggestions of this opinion. It says that the Committees in reporting the bill which became the Act said it provided "for regulation along recognized and more or less standardized lines" and that there was "nothing novel in its provisions." So saying it sustains a rate calculated on a novel variation of a rate base theory which itself had at the time of enactment of the legislation been recognized only in dissenting opinions. Our difference seems to be between unconscious innovation,[42] and the purposeful and deliberate innovation I would make to meet the necessities of regulating the industry before us.

Hope's business has two components of quite divergent character. One, while not a conventional common-carrier undertaking, is essentially a transportation enterprise consisting of conveying gas from where it is produced to point of delivery to the buyer. This is a relatively routine operation not differing substantially from many other utility operations. The service is produced by an investment in compression and transmission facilities. Its risks are those of investing in a tested means of conveying a discovered supply of gas to a known market. A rate

41 See 2 Bonbright, Valuation of Property (1937) 1112.

42 Bonbright says, " . . . the vice of traditional law lies, not in its adoption of excessively rigid concepts of value and rules of valuation, but rather in its tendency to permit shifts in meaning that are inept, or else that are ill-defined because the judges that make them will not openly admit that they are doing so." *Id.*, 1170.

base calculated on the prudent investment formula would seem a reasonably satisfactory measure for fixing a return from that branch of the business whose service is roughly proportionate to the capital invested. But it has other consequences which must not be overlooked. It gives marketability and hence "value" to gas owned by the company and gives the pipeline company a large power over the marketability and hence "value" of the production of others.

The other part of the business—to reduce to possession an adequate supply of natural gas—is of opposite character, being more erratic and irregular and unpredictable in relation to investment than any phase of any other utility business. A thousand feet of gas captured and severed from real estate for delivery to consumers is recognized under our law as property of much the same nature as a ton of coal, a barrel of oil, or a yard of sand. The value to be allowed for it is the real battleground between the investor and consumer. It is from this part of the business that the chief difference between the parties as to a proper rate base arises.

Is it necessary to a "reasonable" price for gas that it be anchored to a rate base of any kind? Why did courts in the first place begin valuing "rate bases" in order to "value" something else? The method came into vogue in fixing rates for transportation service which the public obtained from common carriers. The public received none of the carriers' physical property but did make some use of it. The carriage was often a monopoly so there were no open market criteria as to reasonableness. The "value" or "cost" of what was put to use in the service by the carrier was not a remote or irrelevant consideration in making such rates. Moreover the difficulty of appraising an intangible service was thought to be simplified if it could be related to physical property which was visible and measurable and the items of which might have market value. The court hoped to reason from the known to the unknown. But gas fields turn this method topsy turvy. Gas itself is tangible, possessible, and does have a market and a price in the field. The value of the rate base is more elusive than that of gas. It consists of intangibles—leaseholds and freeholds—operated and unoperated—of little use in themselves except as rights to reach and capture gas. Their value lies almost wholly in predictions of discovery, and of price of gas when captured.

and bears little relation to cost of tools and supplies and labor to develop it. Gas is what Hope sells and it can be directly priced more reasonably and easily and accurately than the components of a rate base can be valued. Hence the reason for resort to a roundabout way of rate base price fixing does not exist in the case of gas in the field.

But if found, and by whatever method found, a rate base is little help in determining reasonableness of the price of gas. Appraisal of present value of these intangible rights to pursue fugitive gas depends on the value assigned to the gas when captured. The "present fair value" rate base, generally in ill repute,[43] is not even urged by the gas company for valuing its fields.

The prudent investment theory has relative merits in fixing rates for a utility which creates its service merely by its investment. The amount and quality of service rendered by the usual utility will, at least roughly, be measured by the amount of capital it puts into the enterprise. But it has no rational application where there is no such relationship between investment and capacity to serve. There is no such relationship between investment and amount of gas produced. Let us assume that Doe and Roe each produces in West Virginia for delivery to Cleveland the same quantity of natural gas per day. Doe, however, through luck or foresight or whatever it takes, gets his gas from investing $50,000 in leases and drilling. Roe drilled poorer territory, got smaller wells, and has invested $250,000. Does anybody imagine that Roe can get or ought to get for his gas five times as much as Doe because he has spent five times as much? The service one renders to society in the gas business is measured by what he gets out of the ground, not by what he puts into it, and there is little more relation between the investment and the results than in a game of poker.

Two-thirds of the gas Hope handles it buys from about 340 independent producers. It is obvious that the principle of rate-making applied to Hope's own gas cannot be applied, and has not been applied, to the bulk of the gas Hope delivers. It is not probable that the investment of any two of these producers will bear the same ratio to their investments. The gas, however, all

[43] "The attempt to regulate rates by reference to a periodic or occasional reappraisal of the properties has now been tested long enough to confirm the worst fears of its critics. Unless its place is taken by some more promising scheme of rate control, the days of private ownership under government regulation may be numbered." 2 Bonbright, Valuation of Property (1937) 1190.

goes to the same use, has the same utilization value and the same ultimate price.

To regulate such an enterprise by undiscriminatingly transplanting any body of rate doctrine conceived and adapted to the ordinary utility business can serve the "public interest" as the Natural Gas Act requires, if at all, only by accident. Mr. Justice Brandeis, the pioneer juristic advocate of the prudent investment theory for man-made utilities, never, so far as I am able to discover, proposed its application to a natural gas case. On the other hand, dissenting in *Pennsylvania* v. *West Virginia*, he reviewed the problems of gas supply and said, "In no other field of public service regulation is the controlling body confronted with factors so baffling as in the natural gas industry; and in none is continuous supervision and control required in so high a degree." 262 U. S. 553, 621. If natural gas rates are intelligently to be regulated we must fit our legal principles to the economy of the industry and not try to fit the industry to our books.

As our decisions stand the Commission was justified in believing that it was required to proceed by the rate base method even as to gas in the field. For this reason the Court may not merely wash its hands of the method and rationale of rate making. The fact is that this Court, with no discussion of its fitness, simply transferred the rate base method to the natural gas industry. It happened in *Newark Natural Gas & Fuel Co.* v. *City of Newark, Ohio*, 242 U. S. 405 (1917), in which the company wanted 25 cents per m.c.f., and under the Fourteenth Amendment challenged the reduction to 18 cents by ordinance. This Court sustained the reduction because the court below "gave careful consideration to the questions of the value of the property at the time of the inquiry," and whether the rate "would be sufficient to provide a fair return on the value of the property." The Court said this method was "based upon principles thoroughly established by repeated decisions of this court," citing many cases, not one of which involved natural gas or a comparable wasting natural resource. Then came issues as to state power to regulate as affected by the commerce clause. *Public Utilities Commission* v. *Landon*, 249 U. S. 236 (1919); *Pennsylvania Gas Co.* v. *Public Service Commission*, 252 U. S. 23 (1920). These questions settled, the Court again was called upon in natural gas cases to consider state rate-making claimed to be invalid under the Fourteenth Amendment.

*United Fuel Gas Co.* v. *Railroad Commission of Kentucky*, 278 U. S. 300 (1929); *United Fuel Gas Company* v. *Public Service Commission of West Virginia*, 278 U. S. 322 (1929). Then, as now, the differences were "due chiefly to the difference in value ascribed by each to the gas rights and leaseholds." 278 U. S. 300, 311. No one seems to have questioned that the rate base method must be pursued and the controversy was as to what rate base must be used. Later the "value" of gas in the field was questioned in determining the amount a regulated company should be allowed to pay an affiliate therefor—a state determination also reviewed under the Fourteenth Amendment. *Dayton Power & Light Company* v. *Public Utilities Commission of Ohio*, 292 U. S. 290 (1934); *Columbus Gas & Fuel Co.* v. *Public Utilities Commission of Ohio*, 292 U. S. 398 (1934). In both cases, one of which sustained, and one of which struck down a fixed rate the Court assumed the rate base method, as the legal way of testing reasonableness of natural gas prices fixed by public authority, without examining its real relevancy to the inquiry.

Under the weight of such precedents we cannot expect the Commission to initiate economically intelligent methods of fixing gas prices. But the Court now faces a new plan of federal regulation based on the power to fix the price at which gas shall be allowed to move in interstate commerce. I should now consider whether these rules devised under the Fourteenth Amendment are the exclusive tests of a just and reasonable rate under the federal statute, inviting reargument directed to that point if necessary. As I see it now I would be prepared to hold that these rules do not apply to a natural gas case arising under the Natural Gas Act.

Such a holding would leave the Commission to fix the price of gas in the field as one would fix maximum prices of oil or milk or coal, or any other commodity. Such a price is not calculated to produce a fair return on the synthetic value of a rate base of any individual producer, and would not undertake to assure a fair return to any producer. The emphasis would shift from the producer to the product, which would be regulated with an eye to average or typical producing conditions in the field.

Such a price fixing process on economic lines would offer little temptation to the judiciary to become back seat drivers of the price fixing machine. The unfortunate effect of judicial intervention in this field is to divert the attention of those engaged in the process

from what is economically wise to what is legally permissible. It is probable that price reductions would reach economically unwise and self-defeating limits before they would reach constitutional ones. Any constitutional problems growing out of price fixing are quite different than those that have heretofore been considered to inhere in rate making. A producer would have difficulty showing the invalidity of such a fixed price so long as he voluntarily continued to sell his product in interstate commerce. Should he withdraw and other authority be invoked to compel him to part with his property, a different problem would be presented.

Allowance in a rate to compensate for gas removed from gas lands, whether fixed as of point of production or as of point of delivery, probably best can be measured by a functional test applied to the whole industry. For good or ill we depend upon private enterprise to exploit these natural resources for public consumption. The function which an allowance for gas in the field should perform for society in such circumstances is to be enough and no more than enough to induce private enterprise completely and efficiently to utilize gas resources, to acquire for public service any available gas or gas rights and to deliver gas at a rate and for uses which will be in the future as well as in the present public interest.

The Court fears that "if we are now to tell the Commission to fix the rates so as to discourage particular uses, we would indeed be injecting into a rate case a 'novel' doctrine . . . ." With due deference I suggest that there is nothing novel in the idea that any change in price of a service or commodity reacts to encourage or discourage its use. The question is not whether such consequences will or will not follow; the question is whether effects must be suffered blindly or may be intelligently selected, whether price control shall have targets at which it deliberately aims or shall be handled like a gun in the hands of one who does not know it is loaded.

We should recognize "price" for what it is—a tool, a means, an expedient. In public hands it has much the same economic effects as in private hands. Hope knew that a concession in industrial price would tend to build up its volume of sales. It used price as an expedient to that end. The Commission makes another cut in that same price but the Court thinks we should ignore the effect that it will have on exhaustion of supply. The fact

is that in natural gas regulation price must be used to reconcile the private property right society has permitted to vest in an important natural resource with the claims of society upon it—price must draw a balance between wealth and welfare.

To carry this into techniques of inquiry is the task of the Commissioner rather than of the judge, and it certainly is no task to be solved by mere bookkeeping but requires the best economic talent available. There would doubtless be inquiry into the price gas is bringing in the field, how far that price is established by arms' length bargaining and how far it may be influenced by agreements in restraint of trade or monopolistic influences. What must Hope really pay to get and to replace gas it delivers under this order? If it should get more or less than that for its own, how much and why? How far are such prices influenced by pipe line access to markets and if the consumers pay returns on the pipe lines how far should the increment they cause go to gas producers? East Ohio is itself a producer in Ohio.[44] What do Ohio authorities require Ohio consumers to pay for gas in the field? Perhaps these are reasons why the Federal Government should put West Virginia gas at lower or at higher rates. If so what are they? Should East Ohio be required to exploit its half million acres of unoperated reserve in Ohio before West Virginia resources shall be supplied on a devalued basis of which that State complains and for which she threatens measures of self keep? What is gas worth in terms of other fuels it displaces?

A price cannot be fixed without considering its effect on the production of gas. Is it an incentive to continue to exploit vast unoperated reserves? Is it conducive to deep drilling tests the result of which we may know only after trial? Will it induce bringing gas from afar to supplement or even to substitute for Appalachian gas?[45] Can it be had from distant fields as cheap or cheaper? If so, that competitive potentiality is certainly a relevant consideration. Wise regulation must also consider, as a private buyer would, what alternatives the producer has if the

[44] East Ohio itself owns natural gas rights in 550,600 acres, 518,526 of which are reserved and 32,074 operated, by 375 wells. Moody's Manual of Public Utilities (1943) 5.

[45] Hope has asked a certificate of convenience and necessity to lay 1140 miles of 22-inch pipeline from Hugoton gas fields in southwest Kansas to West Virginia to carry 285 million cu. ft. of natural gas per day. The cost was estimated at $51,000,000. Moody's Manual of Public Utilities (1943) 1760.

price is not acceptable. Hope has intrastate business and domestic and industrial customers. What can it do by way of diverting its supply to intrastate sales? What can it do by way of disposing of its operated or reserve acreage to industrial concerns or other buyers? What can West Virginia do by way of conservation laws, severance or other taxation, if the regulated rate offends? It must be borne in mind that while West Virginia was prohibited from giving her own inhabitants a priority that discriminated against interstate commerce, we have never yet held that a good faith conservation act, applicable to her own, as well as to others, is not valid. In considering alternatives, it must be noted that federal regulation is very incomplete, expressly excluding regulation of "production or gathering of natural gas," and that the only present way to get the gas seems to be to call it forth by price inducements. It is plain that there is a downward economic limit on a safe and wise price.

But there is nothing in the law which compels a commission to fix a price at that "value" which a company might give to its product by taking advantage of scarcity, or monopoly of supply. The very purpose of fixing maximum prices is to take away from the seller his opportunity to get all that otherwise the market would award him for his goods. This is a constitutional use of the power to fix maximum prices, *Block* v. *Hirsh*, 256 U. S. 135; *Marcus Brown Holding Co.* v. *Feldman*, 256 U. S. 170; *International Harvester Co.* v. *Kentucky*, 234 U. S. 216; *Highland* v. *Russell Car & Snow Plow Co.*, 279 U. S. 253, just as the fixing of minimum prices of goods in interstate commerce is constitutional although it takes away from the buyer the advantage in bargaining which market conditions would give him. *United States* v. *Darby*, 312 U. S. 100; *Mulford* v. *Smith*, 307 U. S. 38; *United States* v. *Rock Royal Co-operative, Inc.*, 307 U. S. 533; *Sunshine Anthracite Coal Co.* v. *Adkins*, 310 U. S. 381. The Commission has power to fix a price that will be both maximum and minimum and it has the incidental right, and I think the duty, to choose the economic consequences it will promote or retard in production and also more importantly in consumption, to which I now turn.

If we assume that the reduction in company revenues is warranted we then come to the question of translating the allowed return into rates for consumers or classes of consumers. Here the Commission fixed a single rate for all gas delivered irrespective of

its use despite the fact that Hope has established what amounts to two rates—a high one for domestic use and a lower one for industrial contracts.[46] The Commission can fix two prices for interstate gas as readily as one—a price for resale to domestic users and another for resale to industrial users. This is the pattern Hope itself has established in the very contracts over which the Commission is expressly given jurisdiction. Certainly the Act is broad enough to permit two prices to be fixed instead of one, if the concept of the "public interest" is not unduly narrowed.

The Commission's concept of the public interest in natural gas cases which is carried today into the Court's opinion was first announced in the opinion of the minority in the *Pipeline* case. It enumerated only two "phases of the public interest: (1) the investor interest; (2) the consumer interest," which it emphasized to the exclusion of all others. 315 U. S. 575, 606. This will do well enough in dealing with railroads or utilities supplying manufactured gas, electric power, a communications service or transportation, where utilization of facilities does not impair their future usefulness. Limitation of supply, however, brings into a natural gas case another phase of the public interest that to my mind overrides both the owner and the consumer of that interest. Both producers and industrial consumers have served their immediate private interests at the expense of the long-range public interest. The public interest, of course, requires stopping unjust enrichment of the owner. But it also requires stopping unjust impoverishment of future generations. The public interest in the use by Hope's half million domestic consumers is quite a different one from the public interest in use by a baker's dozen of industries.

Prudent price fixing it seems to me must at the very threshold determine whether any part of an allowed return shall be permitted to be realized from sales of gas for resale for industrial use. Such use does tend to level out daily and seasonal peaks of domestic demand and to some extent permits a lower charge for domestic service. But is that a wise way of making gas cheaper when, in comparison with any substitute, gas is already a cheap fuel? The interstate sales contracts provide that at times when demand is so great that there is not enough gas to go around domestic users shall first be served. Should the operation of

[46] I find little information as to the rates for industries in the record and none at all in such usual sources as Moody's Manual.

this preference await the day of actual shortage? Since the propriety of a preference seems conceded, should it not operate to prevent the coming of a shortage as well as to mitigate its effects? Should industrial use jeopardize tomorrow's service to householders any more than today's? If, however, it is decided to cheapen domestic use by resort to industrial sales, should they be limited to the few uses for which gas has special values or extend also to those who use it only because it is cheaper than competitive fuels?[47] And how much cheaper should industrial gas sell than domestic gas, and how much advantage should it have over competitive fuels? If industrial gas is to contribute at all to lowering domestic rates, should it not be made to contribute the very maximum of which it is capable, that is, should not its price be the highest at which the desired volume of sales can be realized?

If I were to answer I should say that the household rate should be the lowest that can be fixed under commercial conditions that will conserve the supply for that use. The lowest probable rate for that purpose is not likely to speed exhaustion much, for it still will be high enough to induce economy, and use for that purpose has more nearly reached the saturation point. On the other hand the demand for industrial gas at present rates already appears to be increasing. To lower further the industrial rate is merely

[47] The Federal Power Commission has touched upon the problem of conservation in connection with an application for a certificate permitting construction of a 1500-mile pipeline from southern Texas to New York City and says: "The Natural Gas Act as presently drafted does not enable the Commission to treat fully the serious implications of such a problem. The question should be raised as to whether the proposed use of natural gas would not result in displacing a less valuable fuel and create hardships in the industry already supplying the market, while at the same time rapidly depleting the country's natural-gas reserves. Although, for a period of perhaps 20 years, the natural gas could be so priced as to appear to offer an apparent saving in fuel costs, this would mean simply that social costs which must eventually be paid had been ignored.

"Careful study of the entire problem may lead to the conclusion that use of natural gas should be restricted by functions rather than by areas. Thus, it is especially adapted to space and water heating in urban homes and other buildings and to the various industrial heat processes which require concentration of heat, flexibility of control, and uniformity of results. Industrial uses to which it appears particularly adapted include the treating and annealing of metals, the operation of kilns in the ceramic, cement, and lime industries, the manufacture of glass in its various forms, and use as a raw material in the chemical industry. General use of natural gas under boilers for the production of steam is, however, under most circumstances of very questionable social economy." Twentieth Annual Report of the Federal Power Commission (1940) 79.

further to subsidize industrial consumption and speed depletion. The impact of the flat reduction of rates ordered here admittedly will be to increase the industrial advantages of gas over competing fuels and to increase its use. I think this is not, and there is no finding by the Commission that it is, in the public interest.

There is no justification in this record for the present discrimination against domestic users of gas in favor of industrial users. It is one of the evils against which the Natural Gas Act was aimed by Congress and one of the evils complained of here by Cleveland and Akron. If Hope's revenues should be cut by some $3,600,000 the whole reduction is owing to domestic users. If it be considered wise to raise part of Hope's revenues by industrial purpose sales, the utmost possible revenue should be raised from the least consumption of gas. If competitive relationships to other fuels will permit, the industrial price should be substantially advanced, not for the benefit of the Company, but the increased revenues from the advance should be applied to reduce domestic rates. For in my opinion the "public interest" requires that the great volume of gas now being put to uneconomic industrial use should either be saved for its more important future domestic use or the present domestic user should have the full benefit of its exchange value in reducing his present rates.

Of course the Commission's power directly to regulate does not extend to the fixing of rates at which the local company shall sell to consumers. Nor is such power required to accomplish the purpose. As already pointed out, the very contract the Commission is altering classifies the gas according to the purposes for which it is to be resold and provides differentials between the two classifications. It would only be necessary for the Commission to order that all gas supplied under paragraph (a) of Hope's contract with the East Ohio Company shall be at a stated price fixed to give to domestic service the entire reduction herein and any further reductions that may prove possible by increasing industrial rates. It might further provide that gas delivered under paragraph (b) of the contract for industrial purposes to those industrial customers Hope has approved in writing shall be at such other figure as might be found consistent with the public interest as herein defined. It is too late in the day to contend that the authority of a regulatory commission does not extend to a consideration of public interests which it may not

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directly regulate and a conditioning of its orders for their protection. *Interstate Commerce Commission* v. ~~*Railway Express*~~, 315 U. S. 373; *United States* v. *Lowden*, 308 U. S. 225.

Whether the Commission will assert its apparently broad statutory authorization over prices and discriminations is, of course, its own affair, not ours. It is entitled to its own notion of the "public interest" and its judgment of policy must prevail. However, where there is ground for thinking that views of this Court may have constrained the Commission to accept the rate-base method of decision and a particular single formula as "all important" for a rate base, it is appropriate to make clear the reasons why I, at least, would not be so understood. The Commission is free to face up realistically to the nature and peculiarity of the resources in its control, to foster their duration in fixing price, and to consider future interests in addition to those of investors and present consumers. If we return this case it may accept or decline the proffered freedom. This problem presents the Commission an unprecedented opportunity if it will boldly make sound economic considerations, instead of legal and accounting theories, the foundation of federal policy. I would return the case to the Commission and thereby be clearly quit of what now may appear to be some responsibility for perpetrating a short-sighted pattern of natural gas regulation.